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Biological & Medical Serials

THE

Montreal Medical Journal

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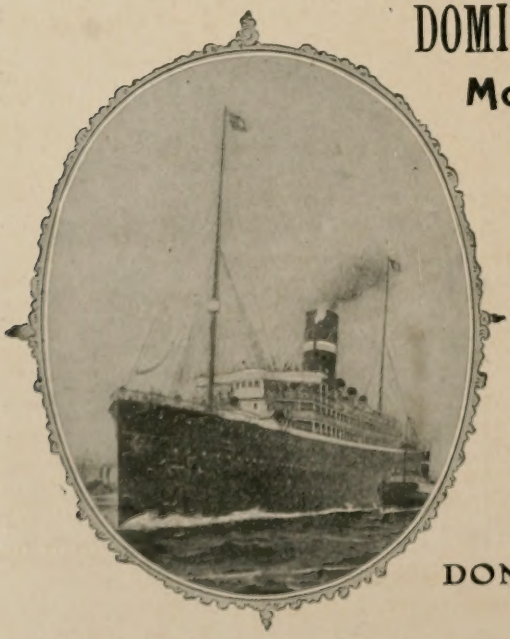

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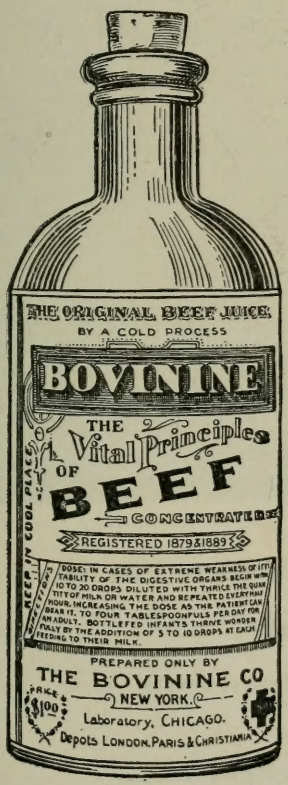

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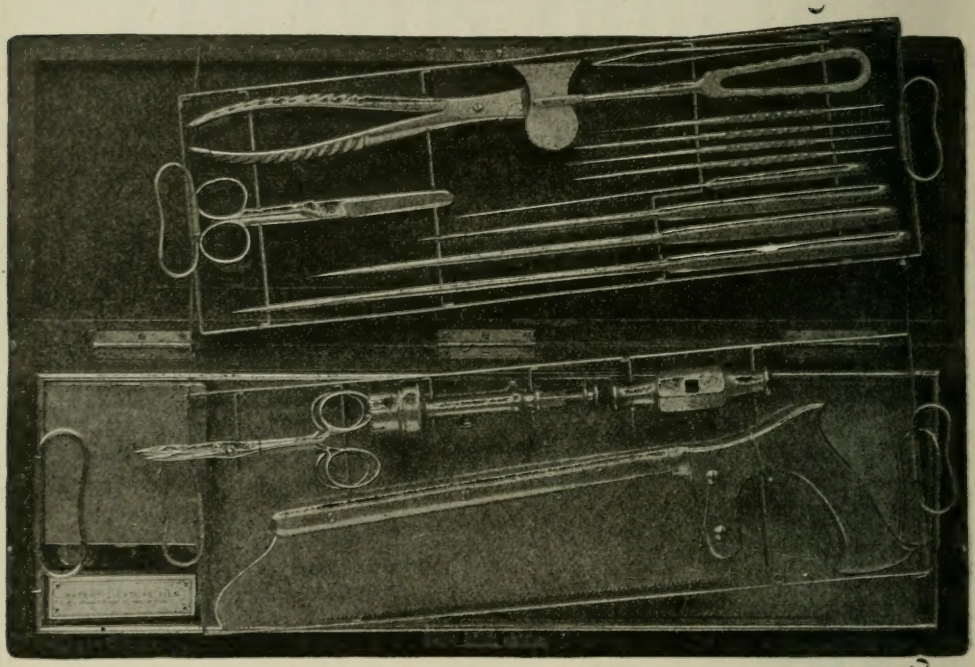

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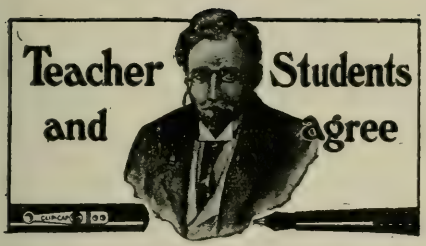

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Montreal Medical Journal

A Monthly Record of the Progress of Medical and Surgical Science.

EDITED BY

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THE

MONTREAL MEDICAL JOURNAL.

VOL. XXXV. NOVEMBER, 1906. No. 11.

THE YEAR'S WORK—ADDRESS OF THE PRESIDENT OF THE MONTREAL MEDICO-CHIRURGICAL SOCIETY, OCTOBER 5TH, 1906.

BY

F. R. ENGLAND, M.D.

It has been customary for the retiring president, at the first meeting of the Session, to give a brief review of the work done by the Society during his term of office, a duty which on this occasion devolves upon me.

The book of registration shows the present membership of the Society to be:—Resident members, 169; non-resident members, 7; temporary members, 43. During the Session of 1905-06, extending from Oct. 6th to June 15th, twelve resident members joined the Society, and one resigned. Eighteen regular meetings were held with an average attendance of 56, which is, I believe, the largest attendance in the history of the Society. There were presented by our members fifteen papers, twenty-three case reports, twenty-four living cases, nineteen pathological and four anatomical specimens and four pieces of new apparatus. Two lantern demonstrations were given.

At the beginning of the Session the programme committee issued a provisional programme, announcing the dates of the meetings and the titles of the papers to be read during the Session. This was found to be of great assistance, and added much to the interest of the meetings; for by this means the subjects of the papers were carefully selected with the view of covering as wide a field of medicine and surgery as possible.

I shall not comment upon any one paper in particular; it is sufficient to remark that as a whole they were characterized by superior excellence,

and showed careful and thoughtful preparation. I think it is not too much to say that, if the papers alone represented the entire work of last Session, the Society would have added its quota to our knowledge of medicine and surgery.

Of the other material presented, in the form of case reports, living cases, anatomical and pathological specimens, there was so much that was of great interest that any attempt at enumeration would be tedious. Perhaps, however, I may be allowed to recall to your memory a few of the rarer conditions reported: a rather singular case of osteoma, where a tumour the size of a small walnut swung loosely in the mouth, attached by a pedicle to the base of the tongue, multiple and numerous echinococcic cysts of the omentum and peritoneum; hysterical swelling of the hand; automobile fracture.

Among the living cases exhibited were a series of four healed cases of rupture of the eye ball; a case of hereditary syphilis with enlargement of the liver, and a remittent fever simulating typhoid; ulceration of the cornea from the diplo-bacillus of Morax-Axenfeld; a series of tuberculous cases showing the result of treatment hy subcutaneous injections of iodoform; splenectomy for large wandering spleen (so-called ague cake), with a most satisfactory result; lymphatic and myelogenous leukæmia; cholelithiasis with fat embolism; extirpation of a chronically inflamed lacrymal sac performed as a prophylactic measure against disease of the cornea. Among the pathological specimens were the following: red infarcts of the liver; obliterating inflammation of the hepatic veins; cerebellar tumours; papilloma of the bladder; sarcomatous glandular tumour of the kidney from a young child; also, a very interesting microscopical slide of the spirachæte pallida obtained from the primary or Hunterian sore.

In addition to the contributions of our own members, several distinguished visitors honoured us with addresses which added not a little to the interest and success of the Session's work.

Dr. John L. Todd, a comparatively recent graduate of McGill, and now of the Liverpool School of Tropical Medicine, gave a most enjoyable and instructive illustrated lecture. With the aid of numerous lantern views, he was enabled to present a very good idea of life and conditions on the Congo, as well as a vivid clinical picture of the more marked features of sleeping sickness in the various stages of this fatal disease.

Dr. Royal Whitman read a valuable paper on the weak or so-called flat foot, dealing with the subject in a thoroughly scientific manner. After considering at some length the foot as a mechanism governed by mechan-

ical laws, he pointed out that the principles of successful treatment lay, not necessarily in supporting the weak or fallen arch of the foot by the Whitman or any other special form of plate, but rather in the direction of correcting faulty attitudes and faulty mechanism and thereby restoring normal function.

At the last meeting of the session we were fortunate in having present Baron Takaki, Medical Director of the Japanese Navy, who gave a most interesting address on the subject of Beri-Beri; his description of the disease, his views regarding its etiology and treatment, and his ultimate success in banishing the terrible scourge from the army and navy, was a fascinating story, told in a quaint manner and with pleasing directness and simplicity. The almost phenomenal results obtained by the medical service of the Japanese Army and Navy during the Russo-Japanese war, lent added interest to the Baron's address.

Through the kind invitation of the Medical Staff of the Royal Victoria Hospital, the Society had the pleasure of attending a special meeting at that institution. An extensive programme had been prepared and was ably carried out. An interesting series of living cases drawn from the general and special clinics was shown, and the pathological display formed a notable exhibition. Such a meeting cannot fail to have an especial attraction for the general practitioner who has but few opportunities of coming in contact with the work of a large hospital. Our members were also invited to attend the inaugural meeting of the Royal Sanitary Institute which was held in these rooms on February 14th, 1906, at which His Excellency the Governor General presided It was a representative gathering and a number of important papers were presented.

We have to record with deep regret the loss which this Society has sustained by the death of Dr. Frank Buller who for many years was one of its most active members. In him we had the highest type of the physician; he was a candid enquirer after truth, and every subject which engaged his attention was approached with a directness and practicability characteristic of his strong personality. He knew the art as well as the science of medicine, and did much to advance them both, as he did to promote that happy cordiality and friendship which has so long existed among the members of our profession in this city. His portrait, and also one of the late Dr. F. W. Campbell, have recently been presented to the Society, and now adorn our walls.

Two years ago the retiring president, in his address. urged the importance of establishing a library upon a satisfactory basis, and also said,

in referring to the question of publishing the transactions of the Soc- *in extenso*, that it was almost a reproach to us that this work, so well begun years ago, should have been allowed to lapse owing to lack of interest on the part of our members. These questions I would once more bring before you for your thoughtful consideration. I regret that our rooms, which are open daily from 2 to 9 p.m., for which we are paying a heavy rental, are not more largely patronized by the members. A number of good journals—and many more might be added if they were used—are always to be found on the table, and two good microscopes have recently been purchased, which are kept at your disposal. The Medico-Chirurgical Society is the one representative body which is open for membership to the entire medical profession. One of its chief aims has always been to enlist the sympathy and co-operation of all. Here the university teacher, the hospital clinician, the laboratory worker and the general practitioner may meet upon neutral ground; and in a broad and friendly spirit engage in the consideration of any question of common interest. Dr. Osler, speaking in these rooms two years ago, when referring to the years he had spent in this city, said that he looked back with greater pleasure to the meetings of the Medico-Chirurgical Society than to anything else; that he had always been able to pick up at the meetings a good deal in the way of knowledge, but what was perhaps of far greater importance, he had learned many priceless lessons of humility and charity; he had always fraternized with his colleagues and endeavoured "to turn the woolly side out." Such friendly intercourse must certainly be an important safeguard against the rule of the few; and if it does not confer complete immunity from, it is at least good prophylactic treatment against petty cliques and factions, which flourish in certain localities. From these evils we in this city have on the whole been remarkably free.

In conclusion, I wish to express my sincere appreciation of the great honour conferred upon me in electing me president of this Society. I would also acknowledge with gratitude, the kind and ready assistance which has been given at all times by the officers and members in general. To our Secretary, Dr. Gordon, I am particularly grateful, feeling, as I do, that the success of our meetings has been in a large measure due to his zealous and untiring efforts. Let us all endeavour to make it a matter of duty which we owe to ourselves as well as to the medical profession, to take a personal interest in the affairs of the Society, and to extend to our newly elected president and officers our generous and active support.

TWO CASES OF TUBAL PREGNANCY.

BY

A. LAPTHORN SMITH, M.D., M.R.C.S., Eng.

Surgeon-in-Chief to the Samaritan Hospital for Women, Gynæcologist to the Western Hospital and to The Montreal Dispensary.

It is a strange coincidence which has been remarked by many operators that one may pass a year without meeting with a case of tubal pregnancy, and then have two or three in as many months. This was the writer's experience, more than once; and now it has happened again. Case 34 was operated on in May. It was reported at the meeting of the Medico-Chirurgical Society on the 29th of May, and published in the MONTREAL MEDICAL JOURNAL in the July number; then Cases 35 and 36, which are now reported, were operated on in July and September of this year.

Case 35. Mrs. B., 24 years of age, came to the Samaritan Hospital in the ambulance on 6th of July, 1906. She was a delicate woman, married at eighteen, and had had four children, the last one two years ago. She had enjoyed fairly good health until a few weeks before admission, when she was obliged to take to bed on account of a severe pain in the left side. She believed she was pregnant about two months, but felt differently as compared with her sensations at other pregnancies. After a few days in bed she began to be so weak that she became alarmed, and sent for her family physician, Dr. Sylvestre who was formerly my assistant, and helped me with operations for tubal pregnancy.

Dr. Sylvestre had already diagnosed nine cases, five of which he had sent to the writer, and another having occurred during the writer's absence from the city he had sent to other operators. So, when Dr. Sylvestre was called to a woman who thought herself pregnant, who had a pain in her left side, and had blanched lips, and a pulse of 120 to 140, he came to the conclusion that she was having an internal hæmorrhage. On examination of the pelvis he found the uterus of the proper size for that state of pregnancy, but he also found a boggy mass on the left side which was exceedingly tender.

He insisted upon an immediate consultation, which was held at 11 a.m. on the 6th of July. His diagnosis was confirmed; for the look of the woman, and the condition of the pulse added to the peculiar boggy feeling of the mass in Douglas cul-de-sac, left little room for doubt, and her removal in the ambulance to the hospital was strongly advised. It took all of his time, however, during the rest of the day until 8 p.m. to overcome the difficulties which were thrown

in the way of her removal to the hospital; but at last she arrived at 9 p.m., when she was taken at once to the operating room and hastily prepared, as by this time her pulse was over 140. On opening the abdomen a good deal of bright red blood gushed out, but further loss of blood was at once arrested by clamps on the ovarian and uterine arteries. The source of the hæmorrhage was found to be a tear on the left tube near the uterus. The tube and ovary which were matted together were removed *en masse,* as it would have been difficult to separate them, but the right ovary and tube were not even examined owing to the patient's urgent condition. About half a gallon of clots and blood was scooped out with the hands; and then, although about a quart still remained, it was thought best to lose no more time in getting her off the table. Half a gallon of salt solution was poured in, and the abdomen was just about to be closed when, in pulling down the omentum, this little fœtus was found near the liver. (Fœtus was exhibited).

The urine was drawn just before the operation and when it was examined, an hour or two later, it was found to be loaded with albumen.

The pulse came down to 130 next morning, and 100 the day after, and her temperature which had been at 97 before the operation rose to normal. Then the woman had to run another gauntlet of a miscarriage of the pregnancy in the uterus, during which a considerable quantity of blood was lost, and necessitated a great many salt solution enemas which were kept up during a whole week. We were obliged to raise the foot of the bed on account of the anæmia, which was not very good for drainage, but fortunately there were no septic symptoms. She had an anxious convalescence, but during the next few weeks we had to contend with a distention which seriously interfered with her heart for which we gave, though in vain, an average of ten grains of quinine a day. All kinds of stimulating enemas were tried but without avail, and it gradually went down under 30 to 40 grains of asafœtida a day. Almost no morphia was used, but she received a 1/30 of strychnine three times a day for three weeks. A curious thing about the distention was that she remained distended even when her bowels were moving four or five times a day. She went home in four weeks and is now being treated by Dr. Sylvestre for the kidney condition, principally by milk diet.

An interesting question in connexion with this case is this: Does Dr. Sylvestre have more cases of tubal pregnancy in his practice than his neighbours who never diagnose any, or have those of his neighbours who have an equally large practice had nine cases which they failed to recognize? The writer knows of at least two cases of tubal

pregnancy which were saved by operation, and had been so diagnosed. He believes that the condition is more frequent than is generally supposed, and he hopes that by reporting these cases, as they occur from time to time, his brethren in general practice will come to recognize them more early and more often.

Case 36. Mrs. S., came into the writer's clinic at the Montreal Dispensary on Thursday, 20th September, 1906, for the first time. She had had a pain in her side for several weeks, and, meeting a friend on the street who was coming to the Dispensary, she came along with her. She objected to the routine examination which every new case has to undergo there, but when after examination she was told that she had a tubal pregnancy, and that she would have to enter the hospital that night and be operated within a day or two she was quite dazed. She was given an admission slip to the Western Hospital, and fortunately the house surgeon on duty made room for her, for, while going up to the bed, the tube ruptured and she had her first hæmorrhage.

As she felt somewhat better on Friday, and as the writer was engaged at another hospital for that day, she was held over till Saturday, when the abdomen was opened in the presence of several members of the staff. On reaching the peritoneum the diagnosis was confirmed, for the dark blood could be seen through it. It was quickly opened, several handfuls of clots were removed, and then this specimen of the distended tube (specimen was shown), about the size of a pear was tied off and removed.

The diagnosis at the Dispensary rested entirely on the pelvic examination; a painful mass in the left side in a woman who believed herself two months pregnant, but whose uterus was empty. Rupture had not taken place at that time, for the mass was as clearly defined as a pus tube, and there was an absence of that boggy feeling in Douglas cul-de-sac which we always feel when the hæmorrhage has been going on for a few days. This patient has made a rapid recovery, her pulse and temperature did not require any morphine; she had no vomiting, and no distention. Her case is a telling argument in favour of early operation, if possible before rupture.

In Case 35 the other tube and ovary were left because there was no time to even look at them owing to the patient's desperate condition. In Case 36 the other ovary was examined and found to be cystic; the cysts were opened and some excised, but the ovary and the tube were left, in deference to the almost irresistible, but, as I believe, mistaken current, of professional opinion which passes under the name of conservatism.

BRITISH MEDICAL ASSOCIATION.

Seventy-Fourth Annual Meeting, Held at Toronto, August 21st, 22nd, 23rd, 24th, and 25th, 1906.

SECTION OF ANATOMY.

THE TEACHING OF ANATOMY IN UNIVERSITIES AND MEDICAL SCHOOLS.

BY

ARTHUR ROBINSON, M.D., President.

In our Section this year we have a wealth of important material to be considered. This being the case, it would obviously be unwise that your President should encroach unnecessarily upon time already too short. Still, within the limits wisely imposed by our authorities, and without entrenching to much upon the time set apart for our more direct work, this appears to me to be the proper time to draw your attention, as workers in the field of human anatomy, to a point of importance, which we may not neglect if we desire to keep human anatomy in its proper place as a living science, whilst at the same time we are careful not to lose sight of its practical importance as a technical subject in a medical curriculum.

Human anatomy appears to have been studied at first by men of an inquisitive turn of mind, who desired to know as much as possible of themselves and their fellows. They were men of the educated class of their time, and it is not improbable that they may have hoped that a knowledge of the structure and arrangements of the various parts of the body would be of service in an attempt to meet and avoid those infirmities and diseases which they knew as the precursors and possible causes of death, just as similar knowledge enabled them to preserve and improve other mechanisms with which they were acquainted. Whether this was so or not, the knowledge gradually acquired was utilized by those who undertook the treatment of injuries and diseases of the human frame, and gradually the study of the details of human anatomy passed at first into the hands of the priesthood, who provided for the bodies as well as the souls of their flocks, and afterwards into the hands of the members of the medical profession. This was the natural course of events, for it is clear that the man who desires to regulate, protect, improve, and repair any instrument must know thoroughly all its main features and as many of its minute details as

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In the following pages we have gathered together abstracts of the addresses of the Presidents of the various Sections at the meeting of the British Medical Association in Toronto. They are drawn from the official reports in the Journal of the Association. [Editors.]

possible. The treatment of the body having fallen into the hands of a special group of men, it naturally followed that they must teach the details of their profession, and, consequently, human anatomy, which is a basis subject, has been taught for the most part in medical schools which may or may not have been associated with universities, and it has been taught almost entirely by medical men.

Under these circumstances, there has been danger that the science might be shorn of its wider limits and reduced to a technical level, the human body being looked upon merely as an object possessing certain definite structure and arrangements of parts which must be studied by the physician and surgeon merely for the purpose of localizing and treating diseases and injuries.

In more than one place the science has been debased to this level, and there is still a tendency in some quarters to decry any wider view and to insist that the medical student shall be taught only the technical details of human anatomy—that is, the positions of organs and parts and their relations to each other. This view is tending to become more prominent in association with the increasing demands which are being made upon the medical student's time from many sides, and it is usually pressed by those who are of the opinion that most of that time should be spent in seeing cases and watching or taking part in their treatment. Nothing could be more harmful, nothing could be more fatal to the best interests of the medical profession and the public than the general adoption of such a view. It would result in the medical man becoming technician—that is, a man whose value is limited by the number of cases he has seen and treated. The medical man thus taught would be very much in the position of the working mechanic who can do well everything he has been taught to do or has seen done, but it is absolutely useless when he is desired to do something new which requires general as well as special knowledge.

Fortunately, there have always been in the medical profession many broad-minded men who have recognized that the man who has a wide knowledge of general principles is better adapted to meet unexpected circumstances than one who is merely provided with a memory of a certain number of observed facts, and luckily the opinions of our broader-minded colleagues have hitherto prevailed. The result has been so far as anatomy is concerned, that in a large number of well-equipped medical schools and medical departments of universities the teaching of anatomy has passed into the hands of specialists—that is, into the hands of men who have spent the greater part of their lives in the study of the subject and who are enthusiasts in its teaching and study, looking

upon man as the highest outcome of Nature and considering him and his relations, therefore, as worthy of the most careful study.

There are clear signs that this will be still more the case in the future. We recognize that it must be so; nevertheless, though we see that the movement is in the right direction, we must not minimize the danger which lies in the path and which will be inimical to the best interests of medical students if it is not carefully guarded against. The danger is that specialists occasionally lose sight of the practical applications of their subject and work at and teach only its more scientifically interesting features. It is a danger which exists in the cases of all subjects taught by specialists and it is one that must be carefully avoided in the case of anatomy, for the majority of the students of anatomy are, and so far as we can see always will be, medical students, who in most cases take up the subject merely as the means to an end. The danger will be avoided if the electing bodies of teaching institutions will take care to appoint as teachers only men who have been through the medical curriculum and who understand the needs of the profession and its students, and if the men thus appointed will keep in touch with their colleagues, who are practising the art of medicine and surgery. They can do that in many ways, of which one of the not least important is taking part in the meetings of medical associations, and thus keeping touch with the general knowledge of the profession and its relationships to their own special branch, and on that acount it is important that there should always be an Anatomical Section at the annual meeting of the British Medical Association.

It should, however, be remembered that the object of a medical curriculum is not to turn out a finished anatomist any more than a finished physician or surgeon, for that is an impossibility in the time through which the curriculum extends. The object should be to give the men passing through the curriculum a wide knowledge of the principles on which they must rely in the practice of their profession, a sufficient knowledge of the details to prevent them making any serious mistake when they first begin to depend upon themselves, and a sufficiency of general knowledge to enable them to take their places as members of a community who are able to appreciate the interests of their fellows, and, what is not least important, an understanding of man's place in Nature and his relationship to Nature's general laws. The amount of detailed knowledge which it is possible to acquire within the period of a medical curriculum is not sufficient to enable a practitioner of medicine to cope successfully with all the various conditions he will meet in his practice, but if he has been thoroughly grounded in general principles,

and in the universal laws which govern animal life, and if he possesses a moderately fair amount of brain power, he will not only be able to deal satisfactorily with all the cases he meets, but he will also be capable of recording observations in a proper manner; he will also be able to balance evidence, to guard against fallacies, and he will probably do something to advance the general knowledge.

It should, therefore, be the object of anatomists to avoid entangling medical students in a superfluity of detail. They should insist upon a thoroughly sound knowledge of the general relations and arrangements of the more important organs and parts of the body, a good knowledge of the general principles which underlie the relationships and arrangements and the advantages derived from them. They should endeavour to make their students acquainted with the general laws of growth and development and with abnormal conditions so far as they are produced by deviations from general laws of growth and development, and carrying on the work done in the Biological Department, they should draw attention to man's relations to other animals in all cases where such relations are evident, and are instructive of the methods by which man has been evolved and the means by which he retains his place in the world. In addition, however, they must see that their students acquire a sufficient knowledge of the detail if the various parts of the body and their relationships to enable them to deal successfully with any emergency of daily life; but, with this exception, it is more important that the students should know the general principles upon which the various systems and organs are constructed, and those on which they are modified, than that they should memorize details which they can look up at any time, whenever necesary, in the numerous good text books which are now at every one's disposal. It is not necessary to enter here into details of those which should be passed lightly over, for we can all easily recall examination questions which show both the right and the wrong trend of thought, but I would strongly urge that if we wish to do well for our medical students and the medical profession as a whole we should deal more with general principles and less with detail than has generally been the case in the past.

LARYNGOLOGY AND OTOLOGY.

J. Dundas Grant, M.D., Edin., F.R.C.S., Eng., President.

Our programme, though fairly comprehensive, has, as it happens, a comparatively small proportion of it devoted to otology proper. It is too late to rectify this, and though I am personally to some extent re-

sponsible for it. I feel that it is to be regretted. I will content myself with expressing the hope that the dazzling brilliancy of the results of our modern surgical otology may not be allowed to divert our gaze from the minute details of intra-aural technique. The former are answerable for the saving of many lives from danger, but the latter enable us often to prevent our patients from running into those dangers. The aurist who as Professor Lucae has s ´d, can cure the largest number of cases without recourse to major operations is the one most deserving of credit. When danger is present or threatening there is no stronger advocate for operative interference than myself.

I am happy to say that our programme includes a paper by Dr. Bacon, of New York, on the question as to how far it is advisable to adopt conservative methods in the treatment of aural diseases, and one by Dr. Clarence Blake on the value of blood-clot as a primary dressing in mastoid operations, both of which are certain to be both suggestive and informing. In the Museum also you will be interested to see a stereoscopic view of a human labyrinth prepared by Dr. Albert Gray, of Glasgow, showing a calcareous patch in the vestibule, while in the Section of Anatomy Dr. Shambaugh will describe the development of the stria vascularis and the circulation in the labyrinth of the pig in continuation of the work with which he is so thoroughly identified. We can only hope that others of our Anglo-Saxon confreres will be encouraged to investigate the internal ear.

Let us remember that the ear is primarily an organ of hearing, and cultivate the accuracy and patience in examination and dexterity and delicacy of manipulation upon which our success in relieving our patients and, may I say, in making our own reputation so much depends.

Another rule which we may apply to our present meetings is to concentrate our attention on what is best in whatever our confrere is imparting rather than in trying to find arguments against what he advances. We may thus lose the opportunity of making dialectical "hits" and of scoring for the moment rhetorical "points," the fallacy of which is subsequently realized, but too late for the mischief to be undone.

By trying to understand and assimilate what is best in papers and speeches I have read or listened to, I have acquired an amount of useful working knowledge of our subject which my limited powers of original insight would never have enabled me to attain. May I suggest this receptive frame of mind as the most profitable one in which to start? At the same time it is quite necessary to be on the alert for the detection of fallacy, whether unintentional—for we are liable to err—or intentional, because it is human to wish to gain one's point. With

your help I shall make it my proud duty to try and keep our discussion clear of both.

OBSTETRICS AND GYNAECOLOGY.

The Relation of Gynæcology to the Work of the General Practitioner.

BY

A. H. Freeland Barbour, M.D., President.

Gynæcology holds out one hand to the general practitioner and the other to the specialist. She has her grand manner, in which, adopting the style and tools of the surgeon, she rivals him in brilliance of work; yet I am not sure but she is greater when, in the guise of the family physician, she cares for the health of the mothers and growing daughters of the community. She is equally at home with the brilliant operator and the sagacious practitioner; and when honours go round, will the greater fall to the operator in his theatre furnished with every appliance and waiting for his patient, or to the practitioner in his gig starting on a long drive across the moor?

Gynæcology as a speciality is sufficiently in evidence in the programme of work in this Section, and therefore I devote the few minutes of this introductory address to the relation of gynæcology to the work of the general practitioner.

The medical student starts with a wrong idea of gynæcology, for which the term "diseases peculiar to women" is in part responsible. Instead of applying the general principles of pathology to pelvic diseases, he thinks that these have a special pathology. He fails to recognize that apart from the peculiarities of the anatomical structures involved, and the physiological changes implied in menstruation, there is no difference between salpingitis and appendicitis, or that epithelioma of the cervix does not differ from epithelioma of the lip. The difficulties which beset clinical teaching in gynæcology send him into practice inadequately prepared to deal as efficiently with diseasees of the reproductive system as with those of other systems in the female; and this insufficient equipment develops in the mind of the laity the idea that a special knowledge is required to deal with disease in this part of the body, a special knowledge as distinct from the experience which comes to a man as the result of having devoted his attention to one branch of medicine.

Now, from one point of view, there is no more reason to treat gynæcology as a speciality than obstetrics, which is admitted to be part

of the work of the general practitioner. A moment's consideration will show that the great majority of gynæcological cases must be at first in the hands of the general practitioner. A married woman expects to be treated in the first instance by the physician who attended her at her confinement, and it is for him to say when she should pass beyond his care. The examination of her case is at first in his hands, the diagnosis of her condition rests with him, and the routine treatment of chronic cases, of what we might describe as minor gynæcology, should be relegated to him.

The recent remarkable development in operative gynæcology has led to the idea that the surgical aspect of gynæcology is gynæcology itself. But this is only one side of it; it has what I might call its medical aspect also.

The term "specialty" applied to gynæcology raises the question as to what we mean by specialty. Gynæcology is not a specialty in the same sense as mental disease, or even diseases of the eye. When a case of mental disease presents itself the practitioner at once recognizes that here is a case which does not belong to him. And the same is largely true of diseases of the eye. Specialism in gynæcology, apart from major gynæcological operations, is more akin to specialism in diseases of the heart or lung, in which, by devoting special attention to affections of one system, and gaining a wider experience in it than falls to the general practitioner, the physician has come to be recognized as an authority on diseases of a given system.

From this point of view it may be said that the way to the specialist in gynæcology passes through the domain of the general practitioner, and that the specialist is to be called in when the general practitioner recognizes that he has not the training or experience to enable him to diagnose or to treat successfully his patients. This view of the subject requires a higher standard of knowledge than he at present possesses, and we stand at the parting of the ways. Is gynæcology to be relegated to the post-graduate course, to be studied only by those who have a bias towards it? Or is it to be made an integral part of the student's training, so that at its termination he will know at least the elements of clinical gynæcology. Of clinical as distinct from systematic, which implies that every student must be taught clinically, and, when possible, examined clinically. I know the difficulties which the latter proposal implies, but from the relation of the diseases of women to obstetrical work, from the reasonable expectation of the general public, from the very nature of the case, this seems to me to be the road along which we must advance at this parting of the ways.

While emphasis has been laid on the teaching of gynæcology to the student as against its postponement to a post-graduate course, a word is necessary as to the manner of presenting it. While taught as a specialty it should be taught in relation to medicine, surgery, and midwifery, the tripod on which the practice of medicine rests. If these three subjects were represented by three circles, side by side, gynæcology is a fourth intersecting the three. The defect in medical education at present is that each subject is taught as it is in itself instead of in its relation to the other subjects of the curriculum. If the teacher in each subject kept before him the relation of his subject to all the others the student would not be in a hurry, as he is at present, to ecape from an overburdened curriculum into general practice. He would begin to be interested in knowledge as an end in itself. At present the utilitarian, which passes readily into the mercantile, bulks too largely in his mind. Aristotle makes the important distinction between what is useful or yields revenue and what is liberal or tends to enjoyment. The study of medicine, if taken in the proper way, might become a liberal education while not ceasing to be a professional one. But I have wandered from my text. My object was to suggest to those who have to do with the teaching of this subject a method of presenting it.

There is another aspect of the same question which I would venture to lay before my colleagues who are engaged in the practice of gynæcology, and that is the necessity of taking a broad view of a case. Specialism is a peak in a mountain range and its development is subject to the same law. A broad foundation must be laid for knowledge, remembering that the height of a hill is related to the breadth of its base. Some rise, like Fujiyama, abruptly from the plain, volcanic in nature, produced by a sudden outburst of imprisoned force. Such are the geniuses of the medical profession. More usually, however, a peak is produced by a gradual process—for nature is rarely in a hurry—which leads to its appearance as a member of a mountain chain. The specialist is slowly differentiated from his fellows like a peak in the Rocky Mountains.

OPHTHALMOLOGY.

R. Marcus Gunn, F.R.C.S., President.

Before proceeding to our regular business, it is fitting that we should remind ourselves and think for a moment of the great loss that Canadian ophthalmology has sustained, since the last annual meeting of this Association, in the death of Professor Buller of Montreal. Trained at

Moorfields, he held office as house-surgeon there for a considerable time, and some of my earliest recollections of the hospital are associated with this period. Buller left there a record of good work well done. His position and his work in Montreal are known to us all, and his striking personality was familiar to most here. It seems but yesterday since he, in collaboration with Dr. Casey Wood, of Chicago, brought to our notice the effects of poisoning by wood-alcohol in a memoir that is already classical. But, apparently in full vigour, he was claimed by an insidious disease which found no remedy, and, as we bitterly remember to-day, Professor Buller is no longer with us.

We welcome most heartily all our visitors, and certainly not least our esteemed colleagues and professional brethren from the United States of America. We are glad that so many have been able to join us here, and in your name I invite them most cordially to consider themselves for the time being members of our meetings, with all privileges, and under the same rules of procedure as ourselves.

PHYSIOLOGY.

PROFESSOR W. D. HALLIBURTON, M.D., F.R.S., President.

In the subject I have selected for my communication I appear before you as a delegate from a Joint Committee of the Physiological and Chemical Societies of England appointed to consider the question of proteid nomenclature, of which I was appointed chairman. The report drawn up by this Committee has been already received and criticized by the two Societies concerned, but it has been felt before its recommendations are likely to meet with acceptance that some expressions of opinion should be obtained from other nationalities. It is specially desirable that uniformity in terminology should be adopted by the English-speaking nations, and if our friends in France and Germany can also see their way to fall into line so much the better.

It is one's earnest hope that by such means the present confusion, which is so great a stumbling block to writers, teachers, and especially to students, may be removed. I fear, however, that past attempts to secure uniformity of nomenclature have not been attended with very great success. Some years ago the Chemical Society in London appointed a Committee to formulate nomenclature, but their recommendations have never been universally adopted by those who write and speak English. They suggested definite meanings, for instance, to certain terminations; for example, *ol* is the affix selected for alcohols, *ine* for basic substances, *in* for materials of more indefinite structure.

Yet we still see leucine and choline spelt without the final *e*, and gelatin with it. In America, where we should have anticipated some amount of support, the old non-conforming conscience has asserted itself, and the tendency there has been in the direction of Germanizing rather than Anglicizing chemical names; creatine is spelt kreatin, sulphur appears as sulfur, and the final *e* in chloride, sulphate, and other salts is usually absent. There is no harm in the phonetic replacement of *ph* by *f*, or of the hard *c* by *k*, but the words chlorid, bromid, and bromat strike the conservative Englishman as being neither euphonious or rational.

But to return from this digression to the particular case of the albuminous compounds. A great change is coming over our chemical conceptions of these substances, and when Emil Fischer's important work upon them is concluded a further revision of nomenclature will no doubt be necessary. The Committee I have referred to were quite aware of this, and recognize that what they now suggest can be only temporary; still, even as a temporary measure, some uniformity is advisable, and certainly the time is not yet ripe for coining strictly chemical names. When that time arrives one can hardly doubt that many of the old familiar terms will still remain, just as many of us still continue to use such names as corrosive sublimate, oil of vitriol, and lunar caustic.

The object of the Committee's recommendations has been as far as possible to retain existing terms, and to reconcile the way in which they are employed in Great Britain, America, and the Continent of Europe. An initial difficulty met the Committee in the selection of the general name for the whole group. The term "proteid," used for it in England, is restricted to a subgroup (the conjugated proteids) by the Germans. The word "albuminoid," still employed by analytical chemists in England, and also by French physiologists in the same sense, is in Germany and also by English physiologists restricted to the heterogeneous group, of which gelatin and keratin are instances. The word "albumin" is fairly universally bestowed on a subgroup; its adoption as a family name would make the present confusion worse, and there is no adequate English translation of the homely German term "Eiweissstoff."

After much debate the word "protein" was recommended as the general name. It is at present so used in America and to some extent in Germany (*Proteinstoffe*). This word has the advantage of admitting of the derived words, "protease," proteose," etc., and it has, after all, the ring of familiarity. We have therefore suggested the abolition of the term "proteid."

The subclasses, beginning with the simplest, would be as follows: 1. Protamines. 2. Histones. 3. Albumins. 4. Globulins. 5. Sclero-proteins. 6. Phospho-proteins. 7. Conjugated proteins. (*a*) Gluco-proteins (for example, mucin). (*b*) Nucleo-proteins. (*c*) Chromo-proteins (for example, hæmoglobin).

For classes 3 and 4 (albumins and globulins) a general term would be advisable, especially from the teachers' point of view. We have not been fortunate enough to find one which would prove acceptable. The expression "heat-coagulable proteins" which was suggested has two disadvantages: First, it is too long; and secondly, it is inaccurate, for other proteins—for example, histones and some nucleo-proteins—are also coagulable by heat.

For Class 7 we still retain the double-barrelled expression "Conjugated protein," mainly because we were not sufficiently lucky to hit upon a single descriptive word. The term implies that here we have to deal with substances in which the protein molecule is united to a prosthetic group. We have ruled out of this class the vitellin-caseinogen group and put them in a separate compartment labelled "Phospho-proteins (Class 6); the prefix "nucleo-" frequently used in relation to these substances is incorrect and misleading.

The new word "sclero-proteid" replaces the word "albuminoid" (gelatin, keratin, etc). as employed by English and German physiologists. The prefix indicates the skeletal origin and often insoluble nature of its members.

Coming next to products of protein hydrolysis (a term preferable to proteolysis), the Committee recommend that these be classified as follows:—1. Infra-proteins. 2. Proteoses. 3. Peptones. 4. Polypeptides. Infra-protein replaces albumin*ate* (acid-albumin, alkali-albumin The termination *ate* implies a salt and so is objectionable. These first degradation products are obtainable from both albumins and globulins, and after much consideration the Committee recommend the prefixing of "infra" (or possibly "meta" which some prefer) to the word "protein" as an indication of comparatively slight chemical alteration.

The term "proteose" includes albumose, globulose, gelatose, etc. The subdivision of these into proto-, hetero-, deutero-proteoses, etc., and the various modifications of Kuhne's original classification were considered by the Committee, but they have wisely determined that at present the whole mater is in too unsettled a state for any final nomenclature to be proposed.

The household word "peptone" is not likely ever to disappear from chemical literature. We, however, propose that it should be restricted

to those further products of hydrolysis which cannot be salted out from solution, but which nevertheless still give the biuret reaction.

In the course of the discussion on this subject we were confronted with the discovery that there are certain vegetable proteins which have hitherto been regarded as peptones which do not give the biuret reaction It seems impossible at present to bring exceptional substances of this kind into any general classification, and the same is true for those curious vegetables proteins, such as gliadin, which are soluble in alcohol.

The polypeptides are still further on the down-grade, though most of those we are acquainted with are the synthetical products of amino-acids which Fischer has prepareed. They do not as a rule give the biuret reaction, but their exact relation to the peptones is still undetermined.

In conclusion, the Committee considered a few special cases of terminology. They had, for instance, some difficulty in assigning to fibrin its proper place in their classification, but ultimately put it among the derivatives of globulins, for its mother substance, fibrinogen, is a member of that group.

They had no difficulty about caseinogen and casein, and strongly urge the continued use of these words in the sense now employed in the majority of English textbooks, that is, caseinogen for the principal protein of milk, and casein for its coagulated condition brought about by the rennet ferment.

In the case of the muscle proteins they are equally unanimous that the original terms, of which I am the unhappy parent, should be adhered to. The new words introduced by v. Furth have only produced confusion, especially among students. The terms to be adopted should therefore be "paramyosinogen" and "myosinogen" for the proteins of the muscle-plasma, "soluble myosin" for v. Furth's soluble myogen-fibrin, and "myosin" for the final product.

I am quite aware that it will not be easy in a meeting like this to adequately discuss the numerous points raised; the present occasion must be regarded rather as a preliminary feeler on the question, and we propose to submit the matter to various societies of physiologists among others to the American Physiological Society, for careful consideration and report.

SURGERY.

Sir Hector C. Cameron, M.D., Glas., President.

I congratulate myself, and still more I congratulate you that, by request of the Executive of the Association, the Presidents of the various

Sections will abstain from delivering any formal addresses in opening, this morning, the business of their respective Sections. I recognize fully the wisdom of this decision and most willingly bow to its requirement. But I feel that I should ill requite the kind favour which has placed me in the honourable position I occupy, and should do but scant justice to my own feelings, were I not now, in a single sentence, to say to you how very greatly indeed I appreciate the distinction thus conferred upon me.

We who practise our profession in Great Britain and Ireland are never forgetful of the great and daily increasing debt which surgery owes to those who cultivate its science and art on this side of the Atlantic; and we therefore naturally look forward with keen anticipation to the benefits which cannot fail to accrue to all of us from the instructive and valuable intercourse which we shall have here with our Canadian brethren, as well as with those American surgeons who will do us the honour of attending our meetings.

You will perhaps here permit me to offer to the latter a most hearty and fraternal welcome. We trust they will take a full share in all our discussions, giving us the benefits of their experience and of those opinions which they are so well qualified to express on the various important and interesting subjects which are to be brought before us. These subjects constitute, I think, a promising programme, provided and arranged for us by the zeal and industry of our secretaries.

With their continued assistance, as well as with the countenance and help of the vice-presidents of the section, I hope to be able so to guide and regulate the business that our meetings may prove—what I am sure they can hardly fail to prove—a source of the highest interest and value to all of us.

THERAPEUTICS.

BY

DONALD MACALISTER, M.A., M.D., D.C.L., LL.D., F.R.C.P., President.

An Imperial Pharmacopœia.

By order of the Council of the Association, "Presidents of Sections are requested not to deliver a formal address in opening their Sections, as complaints have been made of want of time for sectional work." I obey the order with alacrity. But I am allowed a few "introductory remarks," provided they are brief and informal.

First, then, let me express the pleasure which we who come from the Old Country feel in meeting once more on Canadian soil. We remem-

ber the impulse to corporate expansion, the realization of our Imperial responsibilities as a profession, that came to us when the Association, met at Montreal. The force of that impulse is still felt among us. It was good, it *is* good, for us to be here; not only that we may meet face to face with those of our kinsmen beyond the seas whose names are associated in our minds with good work ably done for the advancement of our common science, but also that we may be braced by breathing your larger air, and by coming into closer touch with your strenuous vitality. We therefore count on returning to our tasks at home heartened by the knitting of new and of old friendships, and strengthened by the transfusion of fresh vigour, of new thoughts and influences, from you who are here engaged in fashioning a sister nation. We have come to learn rather than to teach, and thus it has been the endeavour of my colleagues and myself to procure for our Section as many contributions as possible from this side of the Atlantic, and from both shores of the great lakes. We trust that you will find us teachable. That we have journeyed so far in search of knowledge is at least an indication that we are not yet incurably affected with insular sclerosis, not yet wholly refractory to the new ideas and unfamiliar experiences which you are ready to communicate.

In the second place, I would seize the occasion to say a word on behalf of the *British Pharmacopoeia.* As Chairman of the Committee that is charged with the preparation of our national medicine-book, it is not inappropriate othat I should seek to interest this Therapeutic Section, and particularly the Canadian members of it, in our work for the profession. The time for the next revision is approaching, and we desire to make the new book a better expression of our ideal than has hitherto been practicable. Forty years ago the Medical Council declared that in the *Pharmacopoeia* it desired to "afford to the members of the medical profession and those engaged in the preparation of medicines throughout the British Empire one uniform standard and guide, whereby the nature and composition of substances to be used in medicine may be ascertained and determined." In 1898, with the help of the medical and pharmaceutical authorities throughout the British dominions, the first effective steps were taken to produce a work adapted to the general and the local requirements of all parts of the Empire. Our efforts were materially aided by a Canadian Committee, under the leadership of Dr. Blackader, one of your vice-presidents. In the *Indian and Colonial Addendum,* of 1900, a further step was taken to meet the needs of particular localities outside the United Kingdom. Medicinal plants and other substances which had been suggested for in-

clusion by colonial authorities, but which were little known and little used at home, were therein dealt with, and official sanction was given to their local employment. At the instance of the North American Colonies such additions to the *materia medica* as couch-grass, arnica, cotton-root bark, grindelia, black haw, wintergreen, sesame oil, and turpeth were introduced, and suitable preparations containing them were described. But it was added that "with regard to the sources, preparations, and properties of some of these drugs, further investigation, especially in the countries in which they are found, is much to be desired." And a hope was expressed that their official recognition would conduce to research of this kind.

Since that date the new United States *Pharmacopoeia* has been issued (1905). The British Committee has observed with gratification that it exhibits a marked tendency to uniformity with the *British Pharmacopoeia*, and that it includes just such information about some of the "North American" drugs of the *Addendum* as was desired. It also embodies the conclusions reached by the International Congress on Pharmacopoeial Unification, which with Profesor H. C. Wood I was privileged to attend as the Government delegate at Brussels in 1902. These conclusions have now been ratified by an international agreement between the various pharmacopoeial authorities of the civilized world, and have already been observed in framing the new Pharmacopoeias of Austria, Holland, Belgium, Spain, and the United States. I need not say that they will also be embodied in the next *British Pharmacopoeia*. They refer solely to the unification of the strengths of drastic or poisonous drugs and preparations. They seek to secure that throughout the world medicines which bear the same name, and whose potency demands that they shall be used with cautious precision, shall mean the same thing, and shall possess the same determinate strength.

Though we are still far from realizing the dream of a single International Pharmacopoeia, applicable to the whole world of medicine, the results of the Brussels Congress go far to minimize the dangers to the public which in these days of travel attend the lack of agreement between the various national standards. When they have been carefully carried into effect, a traveller whose prescription contains "dilute hydrocyanic acid" will no longer receive it of 1 per cent. in France, 2½ per cent. in Belgium, and 10 per cent. in Spain. At present "syrup of chloral" may contain from 2 to 10 per cent., and "tincture of cantharides" from 5 to 20 per cent. of the active ingredient, according to the country where they are dispensed.

Differences of tradition and environment will long preclude the complete harmonization of the numerous national pharmacopœias; but no such differences stand in the way of adapting the *British Pharmacopoeia* to the needs of all the nations and peoples that are included within the world-wide dominion of Greater Britain. To bring about that adaptation is the aim of the General Medical Council, and we seek the willing and sympathetic co-operation of our brethren beyond the seas that we may attain it. Through the India Office and the Colonial Office at home, I have sent a circular letter to each of the seventy Administrations of the Empire, inviting the considered suggestions of their respective medical and pharmaceutical authorities towards the improvement of the *Pharmacopoeia* from this imperial point of view. In particular, advice is sought as to the permanent inclusion of the drugs dealt with in a tentative manner in the *Addendum* of 1900. From over thirty Colonial governments answers to my circular have already been received, and these contain much useful information for our guidance. But, so far as I am aware, no answer has yet been sent from this great Dominion. Did modesty allow, I should be glad to think that you are silent merely because you are perfectly satisfied with the book as it is, and have no desire to alter it in any way. I am privately assured that that, at least, is not the reason.

May I therefore take advantage of my temporary position to say that without Canadian co-operation we must fall short of our ideal? The new *Pharmacopoeia* will be condemned to antenatal mutilation. Might not a representative Committee be formed under the auspices of this and other medical associations of the Dominion for the purpose of formulating your special requirements, and of affording us the advantage of your special knowledge and skill? The committee at home will welcome your suggestions, and will give them its most careful consideration. In Canada you have experience in the use not only of the *British Pharmacopoeia* and its *Addendum,* but also of the United States *Pharmacopoeia,* and the French *Codex.* You can point out to us what discrepancies between these have proved to be of serious importance in practice, and how they may best be reconciled. You can tell us what non-official drugs are in widespread use among you, and therefore call for recognition in order that their characters and preparations may be exactly defined. You can inform as what articles in the *Pharmacopoeia* are practically obsolete in this country, in order that we may have proper data for deciding as to their omission. Forms of adulteration or contamination with which we are unfamiliar at home may be within your experience; these we should know about when we are revising our stan-

dards and tests of purity. Questions of this kind, and others which will emerge on systematic inquiry are scarcely to be compassed by the home Committee without Canadian assistance. I am sanguine that, after this hint, the assistance will not be witheld.

Before we proceed to the business of the day, allow me a few words on a kindred subject. The co-operation between the Dominion and the United Kingdom, which I have suggested need not be limited to the preparation of an Imperial Pharmacopoeia. Some of us would fain see it extended to the whole field of medical study and practice. You may be aware that by our Medical Act of 1886, a person who holds a recognized Colonial medical diploma granted to him in a British possession, who is of good character, and who is legally entitled to practise in that British possession, is also entitled, without examination in the United Kingdom, to be registered in the *Medical Register*. But before a Colonial diploma can be thus "recognized," the Privy Council must be satisfied that the British possession in question affords to home-registered practitioners such privileges of practising there as to His Majesty may seem just. And by an Act of 1905 it is further provided that for this purpose a Province or State in a larger Federation shall be deemed a distinct possession, and therefore entitled to apply for recognition on its own account. Orders in Council have already been issued, applying the Act to New Zealand, the States of Australia, the Provinces of India, Ceylon and Malta, all of which grant medical diplomas of their own. And as these diplomas have been recognized by the General Medical Council, their holders are at once made capable of registration in the British *Register*, and of acquiring all the rights and privileges which registration confers. A similar enactment exists in relation to foreign countries, and already the Kingdom of Italy and the Empire of Japan have been admitted to corresponding privileges. But, with one exception, the provinces of Canada have not yet applied for admission, and to that extent the medical federation of His Majesty's dominions is incomplete. The exception is Nova Scotia, to which the Medical Act was extended by an Order in Council on May 11th in the present year. The Medical Council learned with great satisfaction of the step thus taken by the Maritime Province, and it looks forward with interest to like applications from the other great Provinces of the Dominion. I am aware that on your Statute Book there stands a Medical Act of 1902, which, were it in operation, would go far to complete the confederation of the provinces by providing for their common action in medical matters, and by assimilating and extending their professional privileges. And I am also to some extent aware of the internal difficulties that have

hitherto prevented the Act from coming into effect. But these internal difficulties need not affect the question of imperial recognition and reciprocity. Under our recent legislation each Province can negotiate for itself with the home authorities, as Nova Scotia has done. It need not wait for the others. His Majesty in Council is the arbiter as to the justice of its claim to be included in the medical federation of the Empire, and to be granted the wider citizenship which that implies.

As things stand, however willing the powers at home may be, a medical graduate of Ontario or Quebec cannot legally hold a medical appointment in the naval or military service of the King. He cannot be appointed surgeon to a British ship, or to any hospital or other public establishment, body, or institution in the United Kingdom. He is ineligible as a medical officer of health; he cannot so much as be a candidate for one of our diplomas in hygiene or State medicine. And lastly, he may not use his degree as a qualification for private prctice in the United Kingdom or in any of the British possessions—and they are not few—that are governed by our Medical Acts. These disabilities must often be irksome, and the more because, so far as Canadians are concerned, they are now self-imposed. The imperial Parliament at least has opened the way for their removal. The next and only remaining step has to be taken by the provincial authorities.

Every year Canadian graduates come over to study and to obtain diplomas at home. When I observe your splendidly-equipped medical schools and hospitals, I cannot help wishing that a strong reverse current might be set up, and that our own students and graduates might acquire the habit of crossing the Atlantic to complete or to supplement their medical education in Canada. That mutual recognition of professional qualifications would further and foster this tendency I am convinced; and I am not less sure that such educationtl interchanges would exert a powerful influence for good, not only upon us but upon you. Sympathy comes from mutual understanding; there is nothing so divisive as mutual ignorance.

I close, therefore, on the note with which I began. We value these occasional meetings outside our islands because they lead to our better knowledge of each other, and so strengthen the bonds of brotherhood which unite us. But the meetings are too rare to accomplish all that is desirable in this kind, and many of us are middle-aged and more before we take advantage of them. If we could but have more intercourse, and have it younger, our mutual sympathies and affections would be warmer still. It is for this reason that I have risked your impatience by wandering a little from the proper subject-matter of our Section. Let us now return to Therapeutics.

PRESENT STATUS OF ANTI-TUBERCULOSIS WORK IN CANADA.

BY

J. H. ELLIOTT, M.B.,

Physician-in-Charge, Muskoka Cottage Sanatorium, Gravenhurst, Ontario.

The second meeting of the British Medical Association in Canada seems a most appropriate time to present a report of what is being done in the Dominion to combat tuberculosis, for it was in 1897, when the Association first met in Canada, that Dr. Barnes, the retiring President of the Association, Dr. Roddick, the President-elect, with others, journeyed to our northern highlands to assist in the opening of the Muskoka Cottage Sanatorium, which had been built by the National Sanitarium Association.

This Association was the pioneer in organized effort to check consumption in Canada, and this was the first sanatorium in Canada.

In the nine years which followed much has been done by this and other organizations, while private individuals, municipalities, and the Governments of the various provinces are showing increased interest in the tuberculosis problem, and have given material assistance in the campaign.

In this paper I wish to review the various agencies at work and to show as far as possible what has been accomplished.

My data have been secured from the secretaries of the various provincial Boards of Health, from the medical health officers of the towns and cities with population of over 5,000, and from the secretaries of the various Associations, while much has been written from personal knowledge.

There are now ten associations in Canada, with forty local branches, for the prevention and treatment of tuberculosis. Two of these are national in their scope, and have a number of active branches. Two provincial associations have been formed, and a number of local associations have been and are being organized throughout the Dominion.

The following list is as complete as I have been able to collect:

National.

National Sanitarium Association of Canada. Organized 1896. Thirty-two branch associations. Their Excellencies Earl and Lady Grey, Patrons; Lord Strathcona and Mount Royal, President; W. J.

Read before the British Medical Association in Toronto, and reprinted from the official Journal.

Gage, Esq., Chairman of Executive Committee; J. S. Robertson, Secretary, *Saturday Night* Building, Toronto, Ontario.

The Canadian Association for the Prevention of Consumption and other forms of Tuberculosis, Nine Branches. Organized 1901. His Excellency Earl Grey, Honorary President; Senator Edwards, President; J. M. Courtney, Esq., C.M.G., Honorary Treasurer; Rev. Wm. Moore, D.D., Secretary, Organizer and Lecturer, 102 Bank Street,

Provincial.

British Columbia Anti-tuberculosis Association; has numerous local branches. C. J. Fagan, M.D., Secretary, Victoria, B.C.

The New Brunswick Association for the Prevention and Cure of Consumption. Dr. Wm. Bayard, St. John, N.B.

Local.

Montreal League for the Prevention of Tuberculosis. President, Sir Geo. A. Drummond; Secretary, Dr. E. S. Harding.

Quebec League for the Prevention of Tuberculosis. Rev. Canon Scott, St. Matthew's Rectory, Quebec.

The District of St. Francis League for the Prevention of Tuberculosis. Secretary-Treasurer, Dr. E. J. Williams, Sherbrooke, Quebec.

Toronto Free Hospital for Consumptives. W. J. Gage, Chairman; J. S. Robertson, Saturday Night Building, Toronto, Secretary.

Hamilton Health Association.

Local Branches of the Canadian Association for the Prevention of Tuberculosis at Charlottetown and Summerside, P.E.I., Colchester Co., N.S., Sherbrooke and Montreal, Quebec, Ottawa, Toronto and Hamilton, Ontario.

Thirty-two local Branches of the National Sanitarium Association (see below.)

National Sanitarium Association of Canada.

In 1896, when one of the founders of this Association wrote to the Toronto City Council offering to give $25,000 to build a home for consumptives, if the city would provide a site, a reply was sent suggesting that the money be devoted to building a wing to the Home for Incurables, so prevalent was the idea that consumption was incurable. When the Association was formed, its first efforts were directed to the establishment of a sanitorium in the delightful Muskoka region. To-day it has two sanitoriums there, one for paying patients, one for the poor. These institutions represent a capital outlay of $140,000 and provide beds for

160 patients. Over 2,000 patients have received treatment, the maintenance expenditure amounting to $400,000. Some of these patients have been maintained free of all cost for periods of six to twelve months,

The Association is endeavouring to do its share in checking the spread of this scourge through Canada. All contributions received are devoted to educational work and the maintenance of needy patients in the Muskoka Free Hospital for Consumptives. To further its work, thirty-two branch associations have already been formed in the following towns and cities. Their gravity is shown in the fact that one-half are contributing funds to maintain one or more beds in the Muskoka Free Hospital.

Branches of the National Sanitarium Association.

The following is a list of places where branch associations of the National Sanitarium Association have been established, the figures in brackets indicating such associations as have raised the requisite amount of $300 a year to endow a bed:

Acton, Brantford (1), Brussels, Belleville (1), Cobourg, Campbellford, Exeter, Guelph (2), Georgetown, Goderich, Hamilton (12)*, Hanover, Ingersoll (1), Kincardine, Lindsay (1), London, Orangeville, Oshawa (1), Ottawa(16)† Picton, Port Hope, Peterborough (1), St. Mary's, Sarnia (1) St. Thomas (1), St. Catherine's, Tilsonburg, Walkerville (1), Wingham (1), Woodstock (1), Montreal (2), Stratford.

The following is a list of municipalities that have contributed the required $300 a year to endow a bed in the Muskoka Free Hospital for Consumptives for a period of twelve months. Allowing four months as the average attendance, this gives accommodation for three patients from these municipalities each year:

Brant Co., Brantford City, Chatham, Niagara Falls, Perth Co., Lambton Co., St. Thomas, Lincoln Co., City of St. Catharine's, Oxford Co.

One hundred and two other municipalities have contributed amounts from $5 to $100 during the past year.

*A pavilion of twelve beds has been set aside for Hamilton and Wentworth County for the past two years, maintained during that period by the Hamilton Branch Association.

†Ottawa has contributed $4,300, which has been accepted by the Association to set aside two wards for eight patients each in the Muskoka Free Hospital for Consumptives. Ottawa not only has furnished this amount for the purpose named, but provides for the maintainenance of all patients sent under agreement with the Association.

Last year there were admitted to the Muskoka Free Hospital for Consumptives, on order of the municipality, from:—City of Toronto, 37 patients; City of Hamilton, 21 patients; City of Ottawa, 10 patients.

Under statute enactment any municipality may make an agreement with the Association whereby the institutions of the Association shall treat its patients and the municipality may pass by-laws or issue debentures to raise money to assist this Association in its work.

To further its educational campaign the Association has arranged with the National Association for the Study and Prevention of Tuberculosis (U.S.A.) that the exhibition which was so successfully organized and held in New York last winter under its auspices, and which has since been held in a number of the principal cities of the States, should be transferred to Toronto, and this is now occupying the new Science Building of Toronto University.

Since this Association was organized the death-rate from tuberculosis in Ontario has fallen from 16 per 10,000 to 12 per 10,000. We cannot but think that this is in part due to the educational side of the work done.

Canadian Association for the Prevention of Consumption.

The Canadian Association for the Prevention of Consumption and other forms of Tuberculosis was organized in March, 1901, at the instance and under the patronage of the Earl of Minto, then Governor-General. The objects of the Association are fully set forth in the constitution then adopted.

Lectures have been delivered in all of the chief towns and centres, in Prince Edward Island, Nova Scotia and New Brunswick; in Sherbrooke and the country round about, in the Province of Quebec; throughout the Ottawa Valley, on both sides of the river, in towns and cities on the St. Lowrence River; in North and South Grey, St. Mary's, London, Ingersoll, Woodstock, and several other places, including Sault Ste. Marie, in Ontario.

About 2½ millions pages, bearing directly on the cause and prevention of consumption have been distributed. There are at present nine active branches; Charlottetown and Summerside, in Prince Edward Island; Colchester County, with head quarters in Truro, Nova Scotia; Sherbrooke and Montreal in Province of Quebec; Ottawa, Toronto, and Hamilton in Ontario, and the Association for the Prevention and Treatment of Consumption in British Columbia, with head quarters in Victoria.

In several smaller places, where there does not seem to be room for active organization, committees are at work distributing literature and placing leaflets wherever they seem likely to be useful.

At the last annual meeting of the Association several large committees were appointed to deal with the folowing:

(*a*) Organization and work: to consider the best methods and lines for future development.

(*b*) How can we obviate the prejudice against the erection of hospitals and homes for consumptives, which are frequently regarded as sources of danger to the surrounding community?

(*c*) Care of public conveyances (steamships, railway carriages, street cars,etc.) to prevent the spread of consumption.

(*d*) Inspection of schools and examination of children.

(*e*) House to house visitation, instruction to sufferers, and early diagnosis.

As a sample of the reports of these committees, that of No. 4 is appended.

Report of Committee No. 4 on Medical Inspection of Schools and Examination of Children.

Having regard to the most essential steps for the prevention of tuberculosis, your Committee begs leave to report:

1. That the proper sanitation of schools and the protection of the health of the children are among the matters of fore-most importance worthy the urgent attention of the various education departments of the Dominion.

2. That only members of the medical profession have the preparation and the experience adequate to fully judge and accurately appreciate the sanitary condition of the schools, and that reliable observations as to the influence of the school and its exercises on the health of the young can be made only by school physicians.

3. That the inspection of schools is a State duty, and that the medical inspection of schools is a legitimate and all-important part of school inspection, and that, therefore, it is a grave responsibility of the education departments of Canada to take measures to protect the health of pupils in schools.

4. That it is specially advisable among other things.

(*a*) That school physicians be appointed to supervise the sanitary conditions of school buildings and their appointments, examine into the health of teachers and pupils and advise them as to all hygienic measures necessary.

(*b*) That steps be taken to remove present insanitary conditions from schools in which they exist.

(c) That rules and instructions be issued as guides to teachers and pupils aiming at the avoidance of practices and habits contrary to the spread of the disease, or the deterioration of physical vigour.

(*d*) That in order to prepare teachers to effectively co-operate with the school physician, they should be thoroughly instructed in the training schools in the principles of hygiene, physical development, and a knowledge of the dangers that commonly threaten the vigorous development of the young.

(*e*) That as the avoidance of alcoholic beverages is a strong factor in the prevention of tuberculosis, the attention of pupils should be systematically called to this fact.

(*f*) That a special medical examination be made on their (pupils) first entry into school, noting age, weight, height, constitution, state of nutrition, etc., and any significant physical and mental conditions; that it is desirable that at the first medical examination the mother be present to give information as to previous illness or predisposition, and to receive instructions as to the care of the pupil at home; that reports be made at regular intervals and copies sent to parents.

(Signed) R. L. H. Cowley,
Convenor.

British Columbia Anti-Tuberculosis Association.

This Association is endeavouring to collect $100,000 to establish a sanatorium for the province. Local branches have been formed throughout the province to further this object. Several city councils have promised yearly grants toward such a sanatorium, and the Provincial Government is prepared to assist.

Montreal League.

The Montreal League for the Prevention of Tuberculosis was organized in the year 1903. It is carrying on an excellent campaign of instruction and relief. Much literature has been distributed, not only to patients and their families, but in schools, factories, and other institutions. Lectures have been held on the subject in more than thirty Protestant churches, and nearly all the Roman Catholic parishes of the city, as well as in several schools, working men's clubs, etc. Through the efforts of the Legislation Committee of the League a by-law has been passed prohibiting spiting on the side-walks.

All cases of tuberculosis reported to the League by physicians, from hospitals or otherwise, are visited more or less frequently as occasion

requires by a qualified inspector, who distributes leaflets of advice, gives verbal instructions, supplies sanitary cuspidores, endeavours to provid better ventilation, and disinfects habitations after or removal.

In the autumn of 1904 the League opened a dispensary especially for persons suffering from pulmonary tuberculosis, where physicians attend for some hours daily for consultation, and patients may be examined and receive advice and medicines. This branch of the work has grown steadily, is much appreciated, and promises satisfactory results. When thought advisable, patients are provided with nourishing food—eggs milk, etc.—also warm clothing. For those who require nursing at home, the co-operation of the Victorian Order of Nurses is enlisted. Cases in an advanced stage of the disease who have no friends in the city are sent to an institution. The great need in this branch of the work is a sanatorium in a healthy situation for incipient cases. The work is supported by subscriptions from the public, aided by a municipal grant.

In the three years of its existence the League has dealt with about 700 cases of tuberculosis, some of whom have received continuous care and assistance for many months.

District of St. Francis League.

The District of St. Francis League for the Prevention of Tuberculosis, organized in 1903, is carrying on a campaign of education. Local societies or subcommittees are formed in each town or municipality of the district about Sherbrooke. The League arranges for examination of all sputum submitted and looks after all indigent patients.

Hamilton Health Association.

This Association has established this year the Mountain Sanatorium at Hamilton, for the care of patients from the city and from Wentworth County who are in the earlier stages of pulmonary tuberculosis. Far advanced cases are not to be admitted. Temporary buildings are at present in use. The Association has 100 acres of land, with funds of $35,000 to carry out its work. About 20 beds are already provided. There being no provision for far advanced cases, the Association maintains a visiting nurse to care for such cases in their homes, keeping in touch also with the local Board of Health.

Toronto Free Hospital for Consumptives.

This Association has been formed in Toronto to make provision for all patients with far advanced disease. It first provided beds only for the far advanced poor of the City of Toronto, but such has been the

success of the undertaking that kind friends have made it possible for this Association to enlarge its scope, and it soon hopes to be able to accept the far advanced cases not only of Toronto, but to provide a number of beds for patients from elsewhere in Ontario. The hospital of this association is situated at Weston, Ont., overlooking the Humber Valley. It is the first institution in Canada to care for those advanced in consumption. With a capital expenditure of $50,000, beds for over 60 patients have been provided. In its first year 136 were cared for.

Provincial Measures.

British Columbia.

(Reported by Dr. C. J. Fagan, Secretary of the Provincial Board of Health.)

Notification laws have been adopted and are reasonably well carried out, as is also the antispitting by-law.

Local societies are formed all over the province, the objects of which are:

(*a*) To collect funds for the maintenance of a consumptive sanatorium.

(*b*) To look after the interests of local consumptives.

(*c*) To establish a course of lectures on consumption in public schools.

(*d*) To ask for a municipal grant from local authorities towards the maintenance fund.

(*e*) To ask clergymen to devote one Sunday sermon each year to health matters, the collection to go towards the maintaining of the sanatorium.

Cases of pulmonary tuberculosis are not admitted to the wards of public hospitals, but it is advocated that special provision be made for the handling of advanced cases by hospitals.

The Vancouver General Hospital has provided a special building for the handling of advanced cases, and it is hoped that other public institutions will do likewise.

At present there is no special hospital for the treatment of incipient consumptives, but I may state that a considerable sum of money has already been collected for building purposes, and most of the British Columbia towns have organized societies with the object of maintaining our sanatorium. Already a considerable sum is subscribed and promised, and I am satisfied from indications that we can depend on receiving a sufficient sum for maintaining an institution for our own tuberculous patients.

Disinfection after tuberculosis is attended to as it is after any other contagious or infectious disease.

All milk dealers must produce a certificate signed by the Provincial veterinary surgeon that the herd from which their supply is derived is free of tuberculosis.

Alberta.

(Reported by Dr. A. E. Clendenan, Provincial Health Officer.)

This province, being inaugurated September 1st, 1905, has not yet a Public Health Act such as is in operation in the older provinces, nor is there a provincial laboratory. Physicians and druggists are asked to report all cases known to them. Owing to the large number of consumptives coming to Alberta, many of whom are indigent, an effort will be made at the next session of the Legislature to enact that every case that enters must report his condition to the Government, and be prepared to either pay all expenses for maintenance or come provided for by the Governments of the other provinces of the Dominion Government.

It is hoped that in the new Public Health Act tuberculosis will be put as nearly on the same footing as other contagious diseases as is practicable, each case being reported in such a way that every affected person will be under the direct supervision of the Government, and be provided with literature and given such other attention as is necessary to eradicate the disease from the province.

An effort is on foot to organize a very considerable number of anti-tuberculosis associations, such as exist to a limited extent in eastern Canada.

Approximately there are 200 cases of tuberculosis amongst the Indians of the province reported by the Dominion Indian Reserve doctors to the Dominion Government. Since these cases are entirely under the control of the Department of the Interior, the ordinary means of combating tuberculosis are difficult of operation. The Indians and whites, however, mix but little.

Manitoba.

The Provincial Board of Health, with the physicians of the province, are endeavouring to secure legislation for the erection of a provincial sanatorium.

The Provincial Laboratory examines all sputum submitted.

Province of Ontario.

The Province of Ontario has enacted special legislation to assist in the erection of sanatoriums, providing one-fifth of the cost (up to

$20,000) of a sanatorium erected by any municipality or recognized association. Three sanatoriums have received the help to date.

In addition to assisting in the initial cost, the Government grant assistance to the extent of $1.50 per week per patient for all public ward patients, in lieu of the ordinary hospital grant, which is about 15c. per day.

At the last session of the Legislature $15,000 was voted the Muskoka Free Hospital for Consumptives to assist in its work.

The Provincial Laboratory examines all sputum free of charge.

Quebec.

(Reported by Dr. Elzéar Pelletier, Secretary of the Provincial Board of Health.)

In January, 1895, the Legislature set apart 400 acres in Trembling Mountain Park for sanatorium purposes, but nothing has been done to supplement this.

In June, 1905, 137 acres were granted for sanatorium purposes on Lake Edward, 1,200 feet above sea level. Towards construction of the proposed sanatorium the Rev. Canon Scott reports $22,000 promised, conditional on $40,000 being raised.

Legislative enactments:

1. The Health Act enacts that open tuberculosis is to be notified to municipal authorities.

2. The by-laws made by our Board (under the authority of the same Health Act) renders disinfection obligatory after the death of a tuberculosis patient.

3. The by-laws made by our Board respecting factories provide for lighting, cubic space, aëration and ventilation, evacuation of dust, etc.

4. Tracts and *Sanitary Bulletin* are distributed gratis.

The Provincial Board of Health has transmitted to the Government, for sanction, additional by-laws, which when duly sanctioned will:

(*a*) Make disinfection obligatory after the removal of a tuberculosis patient (as well as already done after his death).

(*b*) Forbid spitting in streets, roads, public places, buildings, and conveyances.

(*c*) Provide for confiscation of meat from tuberculous animals, about on the lines suggested by the Royal Commission on Tuberculosis.

(*d*) In regard to habitations: Provide for (1) a minimum cubic space, (2) natural lighting, (3) prohibition of the use of cellars for day or night occupation, (4) minimum cubic space in night refuge, (5) open spaces around dwellings, (6) damp courses in certain cases.

(*e*) In regard to hospitals, homes, asylums, prisons, provide for cubic space and ventilation.

(*f*) In regard to dairies, provide, among other things, for (1) the notification of tuberculous cases, (2) the isolation of suspected tuberculous cows until a veterinary surgeon has verified to the udder not being involved; the certificate to be renewed at least every three months and to be put aside whenever bactrial examination would show the existence of the bacillus in the milk.

(*g*) In regard to educational institutions, provide for cubic space, ventilation, natural lighting, prohibition of dry sweepings.

New Brunswick.

The New Brunswick Medical Society and representative business men have met the Government urging the establishment of a provincial sanatorium. The Provincial Board of Health have made similar recommendation. The Government have as yet taken no definite action.

Nova Scotia.

Nova Scotia has been the first and, so far, the only province in Canada to provide a provincial sanatorium for its patients. This is situated at Kentville, in the Annapolis Valley. Initial cost, $20,000; annual grant, $9,000; 20 beds. The province does not intend to provide beds for all, but has undertaken this work rather for its great educational value. The Provincial Laboratory examines sputum free of charge.

Prince Edward Island.

No Board of Health regulations *re* tuberculosis.

Municipal and Local Measures.

Letters of inquiry were sent to sixty-two towns and cities with population of 5,000 and over, as recorded at the census of 1901, submitting the following questions:

1. Have you any special hospital or sanatorium for the treatment of cases of pulmonary tuberculosis?

2. Are cases of pulmonary tuberculosis admitted to the wards of all or any of your hospitals?

3. Have any special wards been provided for the care of these cases?

4. Have you a special dispensary for the treatment of tuberculosis? If so, kindly outline its organization.

5. Have you any local organization for the care of tuberculous patients in their homes?

6. Have you an antispitting by-law?

6A. Are notices posted without by-law?

7. Have you compulsory or voluntary notification of phthisis?

8. Does your Board of Health disinfect after tuberculosis, as after scarlet fever and other infectious diseases?

9. Other measures.

Special Hospitals or Sanatoriums.

No municipality, as far as I can learn, has built a sanatorium or hospital for the care of its tuberculous patients. Local philanthropic organizations have made provision in some places, while some municipalities send their patients to existing sanatoriums.

Vancouver has a special building for tuberculous cases at its general hospital.

Admission of Patients at General Hospitals.

Six towns and cities have no hesitation in accepting tuberculous cases into their hospitals; 7 admit, but insist on patients being isolated, 1 or 2 using isolation wards; 4 admit only incipient cases. Other than Vancouver, no hospital has constructed special wards. In some, tents are used.

Three cities have tuberculosis dispensaries; 5 cities have organizations for the care of the poor in their homes.

British Columbia has a provincial antispitting by-law. Of the 31 towns outside this province which have reported, 15 have antispitting by-laws, while 4 others have notices posted; in some, little attention is paid except by the street car companies.

Notification of cases is requested by the Provincial Board of Health in British Columbia; in other provinces, 6 have compulsory notification and 5 voluntary; 20 disinfect after death or removal of patient, or during course of illness if patient has been careless, where reported or requested.

List of Sanitoriums in Canada.

Ontario.—Muskoka Cottage Sanatorium, Gravenhurst; 85 beds. $12 and $15 weekly. For incipient cases. Dr. J. H. Elliott, Physician-in-Charge.

Muskoka Free Hospital for Consumptives, Gravenhurst; 50 to 70 beds. Free, or patient pays in part if able. For incipient cases. Dr. C. D. Parfitt, Physician-in-Charge.

The Mountain Sanatorium, Hamilton; 20 beds. Dr. A. D. Unsworth, Physician-in-Charge.

Toronto Free Hospital for Consumptives, Weston; 60 beds. For advanced and far advanced cases. Free, or patient pays in part if able. Dr. W. J. Dobbie, Physician-in-Charge.

Galt has provided a Swiss cottage for care of advanced cases.

Stratford has two tents for advanced cases.

Quebec.—Lahl Ghur, Ste. Agathe des Monts, for incipient cases; 21 beds. $14 weekly. Dr. Howard D. Kemp, Physician-in-Charge.

Camp of Montreal League for Prevention of Tuberculosis for Poor of Montreal.

Nova Scotia.—Provincial Sanatorium, Kentville; 20 beds for residents of province. Patients pay $5.00 weekly. Dr. W. S. Woodworth.

Wolfville Highlands Sanatorium; 10 beds. Private. Dr. G. E. DeWitt, Wolfville.

Alberta.—Calgary Sanatorium, Calgary; 16 beds. Private.

Seaside Treatment of Surgical Tuberculosis.

In Europe and the United States much attention is just now being drawn to the beneficial effect of the seashore on tuberculous children, and many seaside hospitals for children are being established. For many years the Victoria Hospital for Sick Children in Toronto has during the summer months transferred all cases of surgical tuberculosis to the Lakeside Hospital on Toronto Island, with most satisfactory results. There is no special ward for tuberculous children in the Toronto Free Hospital for Consumptives at Weston.

Dispensaries.

1. Dispensary of the Montreal League for the Prevention of Tuberculosis, 691 Dorchester Street. Opened November, 1904. Open six days weekly. Last year 193 patients attended. When too ill to attend they are visited in their houses. Patients are supplied with all necessaries in the way of food and clothing.

2. Tuberculosis Dispensary and Clinic, Toronto General Hospital. Opened January, 1906. Visiting nurse visits at homes and reports surroundings and conditions. Patient given sputum flask, etc., with instructions. Food and clothing supplied when needed. Special wards available if necessary to bring patients into hospital. Houses reported to Board of Health for fumigation. When possible patients sent to sanatorium at Weston or Gravenhurst.

3. Tuberculosis Dispensary of Hamilton City Hospital. Opened 1906.

Brehmer Rest, Ste. Agathe des Monts, Quebec. Dr. A. J. Richer, Physician-in-charge; Miss Barnard, Secretary, 33 Lorne Avenue, Montreal. Patients pay $4 per week.

This sanatorium has been instituted for the care of patients who have no active tuberculosis, but who are convalescing from pneumonia, pleurisy, and typhoid fever, also patients with anæmia, debility, etc. Such institutions play an important part in the prevention of tuberculosis.

What Remains to be Done.

This summary of the antituberculosis work in Canada shows that much has been done in recent years. Each year new measures are brought forward, an increasing number each year, and yet we have little more than begun—much earnest work has yet to be done to secure a marked decrease in the death rate throughout the Dominion.

There is still much apathy shown when active measures for the suppression of the disease are adopted—lax enforcement renders them useless. More than one local medical health officer has reported: "We have an antispitting by-law, but it is never enforced." In another town where no measures have been outlined, the health officer writes: "Public interest in this question is dormant. It is a labour of Hercules to even try to arouse it. Our Board of Health takes no interest in tuberculosis patients."

The work of prevention requires the co-operation of all the forces available. We must first deal with those suffering with the disease, for inasmuch as the disease is spread only from those having an open tuberculosis, we must concede (leaving out of discussion here the communicability to man of bovine tuberculosis) that the disease would soon all but disappear could all who have an open tuberculosis be placed under proper discipline, and all sputa and other bacilli-bearing discharges be destroyed.

This entails much work on the part of the physician who is attending the patient; full personal instructions must be given, and these instructions must be carried out. Leaflets of instructions to patients are very useful, but personal instruction is more efficient.

For those patients who will not follow the directions given, and are careless, special hospitals for detention are necessary, and such should be provided for such people as are wilfully unclean, and whose habits are such that they are spreading disease about wherever they may be.

Sanatoriums are a necessity for the care of those who cannot be kept under close supervision at home, or whose surroundings are not conducive to recovery—whether this be from insanitary conditions, the presence of meddlesome relatives and friends, or the thousand-and-one petty things which prevent a patient following the necessary out-of-door

life and observing the prescribed rest or exercise. More sanatoriums are required throughout Canada, particularly for the poor who are not in a position to go far from home.

Separate provision should be made for incipient and far advanced cases.

Special dispensaries can do much for those who must continue at work, as in the case of a breadwinner in a poor family. The dispensary physicians and nurses can see that his house is suitable, and can assist in arranging for out-of-door sleeping, can see that he is provided with all necessaries, and also be assured that he is careful of those about him. The dispensary staff, too, should examine at intervals all of the family, so that any infection may be discovered while still a closed tuberculosis.

Physicians in attendance upon all cases, whether poor or in good circumstances, should endeavour as far as possible to see that all the members of the family are carefully watched—particularly so in houses where the patient has been known to be careless, or where, as is not infrequently the case, he has been suffering with an open tuberculosis the presence of which has not been suspected or recognized.

The members of tuberculosis families should be given special instruction in hygienic living, and be warned of the dangers of lowered vitality, whether due to disease, overwork, poor food, or vice.

The physician should be proficient in diagnosis and should endeavour to make diagnosis early, remembering that under sanatorium treatment 75 per cent. of incipient cases recover, of moderately advanced about 15 per cent., and of far advanced cases barely 1 per cent. To state that the physician is often careless is unpleasant writing, but again and again we meet such cases. An instance such as the following is, unfortunately, far from uncommon. A young man came to me for examination and treatment. I found far advanced disease involving all of the left lung and half of the right, with well-marked cavity formation in the left upper lobe. There was also intestinal tuberculosis. Sputum 1 oz. daily, teeming with tubercle bacilli, and much elastic tissue present. I gave his mother a report, with necessarily an opinion of hopeless prognosis. He is the only son and she a widow. She writes:

"It is all so uncalled for. I have had him under medical treatment for five months and all along urged that he have the best attention, and if his lungs were in danger I would send him away from home if necessary. I have been exceedingly anxious for four months and wanted a consultation, but my physician assured me only a few days

before my son left home that there was nothing wrong with the lungs. I was so anxious, however, that I sent the sputum to the provincial bacteriologist the next day on my own account, with the result that my worst fears were realized.

No comment is needed. In my work I see this too frequently.

Notification of all cases of tuberculosis is necessarily a part of efficient work in the crusade, and where there is a live, earnest Board of Health which will co-operate with the physicians, no time should be lost in enforcing compulsory notification.

Local associations can do much in assisting the authorities. They can carry on an educational campaign, disseminate knowledge concerning the methods to be adopted for the prevention of tuberculosis, assist in movements for the erection and maintenance of sanatoriums, special hospitals, dispensaries, etc.

We must not forget that every measure that makes for a higher standard of living is of value in the campaign against tuberculosis. We should see that our houses, our towns, our cities, are rendered as sanitary as possible, admitting sunshine, avoiding dust-gathering rags and hangings, keep our streets clean, do away with the smoke nuisance, destroy insanitary buildings, inspect our schools, workshops, and factories, arrange for medical inspection of school children and of workmen in factories, especially those whose occupation predisposes to tuberculosis.

Our Federal and Provincial Governments must pay much more attention to the subject of human tuberculosis and make liberal and judicious appropriations to be expended along proper lines before much headway can be gained. Do we not feel rather ashamed that our Dominion Parliament expends yearly large sums to combat tuberculosis in cattle but has not annual appropriation to combat human tuberculosis, which carries off 10,000 of our citizens each year? It spends many dollars per head to bring in immigrants, but will make no expenditure to assist in stopping this large yearly migration.

Every individual, every municipality, every province, as well as our Federal Government, has a special duty in this crusade to fight a disease which has attacked over one-half of our homes.

By increasing the efficiency of the means now at our disposal, by the introduction of such measures where now none obtain, and by earnest, active, aggressive work of education our large annual mortality should soon show a marked decrease.

THE

Montreal Medical Journal.

A Monthly Record of the Progress of Medical and Surgical Science.

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EXAMINATIONS FOR LIFE INSURANCE.

We have been favoured by Dr. Laurendeau with some details of the propaganda which he has undertaken to compel insurance companies to accept as a basis of contract the terms which may be put forward by Medical Societies. The establishment of a minimum wage is a new doctrine in the profession of medicine, and the whole question is worth examining.

It has always been the custom of Medical Societies to establish a tariff of fees for the guidance of their members, and the information of the public; but such a scale has never been mandatory. It has always left the practitioner free to accept the remuneration named, to demand more, to accept less, or to render his services gratuitously if he desires.

We say at once that this is the proper position for members of a profession to adopt—to demand as much as they can get, to accept as

little as they like. To establish a rate below which they will not work is to abandon all professional decorum, and enter into the ranks of the trades-unions with carpenters, plumbers and house-smiths.

We are not disposed to underestimate the value of belonging to a medical society. We place a still higher estimate upon the freedom of the individual to decide what work he shall do, and the conditions upon which he will do it. If a physician take it into his head to demand five or ten dollars for an examination and an opinion, he is within his rights; if he choose to render the same service for nothing, no one will affirm that he has transgressed any just rule.

Economy is now the formula of insurance companies. One company, at least, shows for the first eight months of the present year a saving in expenses of close upon four million dollars. Of this saving near three hundred thousand dollars is credited to the medical department, and there is no evidence that the work is being done inefficiently. The agitation on the part of Medical Societies for a higher fee will only hasten the policy which many companies are now pursuing of appointing salaried medical officers.

The American insurance companies cannot very well help themselves. In New York they are restricted by law as to the amount which they may expend for new business, and the examining fee comes under that head. The agent has had his commission cut to the bone. The medical examiners are getting their cut in turn.

An insurance company is not in the nature of things a trust company. It is a commercial partnership, in so far as the assured shares in the profits. Up to a year ago, under the liberal management which then prevailed, the profits to policyholders in the best companies were very large, and it was never questioned that their investments were unsafe. True, there was some waste, as there is in every rapidly-growing business, but the amount was trifling in comparison with the profits. Taking the total number of policyholders, the wastage, putting the worst face upon it, amounted to seven cents per year upon a profit of one dollar.

We are offering no opinion upon the relative merits of the old system and the new. We are merely saying that things have changed. Insurance companies are now in the category of trust companies. The managers have no inducement to seek new business. Indeed, they are limited by law in the amount which they may accept. That amount will come without much solicitation. In times past the insurance agent was a familiar figure. Who has seen one within the last year?

The point which we are making is that the companies do not now care much whether they get business or not. If they find difficulties

in any one field, they have no hesitation in withdrawing from it. If the business does not warrant their employing a salaried medical officer, and they cannot have examinations made for the fee which they think they can afford, then they will withdraw from that field.

In our judgment a fee of three dollars is not sufficient for an examination for life insurance, though we are obliged to admit that in certain cases a larger fee is allowed. The contention of the companies is that this fee is in excess of that usually paid to practitioners, especially in the country. Even if this be admitted, the fact is susceptible of some qualification. A physician who visits a patient usually meets with a ready reception. He does not find the patient away from home, nor is he asked to call at a more convenient time. Indeed, an examiner of some experience informs us that the financial results work out to less than a dollar and a half a visit. The real fallacy lies in the assumption that a visit to a patient may be in any way compared with a visit for life insurance examination. The one is purely professional. The other is in a degree commercial. The physician who visits the sick is fulfilling his normal function. He is living his life in harmony with a noble tradition. A physician who ministers faithfully to his patients is sure of his reward in the consideration which he wins, in the extension of his good report to others, in advancement in his profession. As an examiner none of these rewards are open since the point of view of the patient and the applicant is quite different. When the examination is over the examiner has had his reward, and it is all which he will get.

The medical profession is face to face with a new condition which it cannot alter. The companies have offered a fee which is fairly uniform, and we do not believe that any individual company will depart widely from the standard. Medical societies may make life-insurance difficult. In some localities they may destroy it. We do not believe that any agitation will restore the old fee of five dollars. Even if the combination of Medical Societies be more close than it is likely to be, we do not believe that any results will be accomplished, and the Medical Societies will have put themselves in the wrong by the attempt.

UNITY.

The great work of mediation between England and France, those two hereditary foes, which was undertaken by His Majesty King Edward has reached its fulfilment in the recent outburst of affection

between the medical students of McGill and Laval. Now they are brethren dwelling together in unity.

Only five years ago the students on the hill were impelled to descend upon Laval, breathing out threatenings, and signifying their sentiments towards the sister institution by breaking windows. They were received with inhospitable streams of freezing water; it was only a bit of English aggression and French pleasantry.

Yet the importance of such sympathy cannot be overestimated. These are the men who will meet together in consultation, who will discuss their cases in a common Society, who will sit side by side, and give counsel in the College of Physicians over the welfare of the profession. These grave seniors of twenty years hence cannot forget the days when they were welcomed to invade the laboratories of McGill with their "Marseillaise," and made holiday together over their sports.

We appear to be living in the golden age. At the last meeting of the College of Physicians the representatives of McGill proposed a reciprocity with Great Britain and the principle was instantly agreed to. The College announced that in future it would enact a five years' course of study from candidates for the license; and forthwith the McGill Calendar appears with an inset printed in red ink that a five years' course would be instituted.

A great French surgeon visited Montreal and all, French and English, sat down together to do him honour. Those who were present at the feast report that in the new spirit of amity the gift of tongues descended upon the company. As a result of the negotiations between Bishop's College and McGill the names of all Bishop's graduates appear in the McGill Calendar. It would not be surprising if, in the future, one volume would serve for McGill and Laval also.

CANADIAN MEDICAL ASSOCIATION.

The report of the special committee upon the re-organization of the Canadian Medical Association has been issued along with a draft of a proposed new constitution and by-laws. The draft of the constitution and by-laws appears to be well drawn, and likely to cover every circumstance which may arise. It does not differ materially from the form employed in similar institutions, and if carried out should provide ample for all immediate needs.

Section 5 of Article II. deals with the vexed question of publication of papers, and reads: "All papers, essays, photographs, diagrams, etc., presented in any section, shall become the property of the Association, to be published in the official journal of the Association or not as

determined by the Finance Committee, and they shall not be otherwise published except with the consent of the author and of the Finance Committee."

Construed strictly, as all by-laws must be, it means that no paper read before the Association can be published save with the consent of the Finance Committee in a journal which has no existence. This, we think, is going to an extreme, because some of the papers read before the Association must surely be worthy of publication somewhere.

The presumption is that the Association purposes founding a journal of its own, but we are obliged to confess that the proposal does not look very attractive. The field is pretty well occupied, Toronto itself being provided with four periodicals. If all interests could be brought together, and merged into one Canadian journal, we would have an organ worthy of the country and of the profession. To such an effort we promise all the support which we can give.

This JOURNAL has been favoured with the second report of the Wellcome Research Laboratories at the Gordon Memorial College, Khartoum. The functions of these laboratories are to promote technical education; to promote the study, bacteriologically and physiologically, of tropical disorders, especially the infective diseases of both man and beast peculiar to the Sudan, and to render assistance to the officers of health, and to the clinics of the civil and military hospitals; to aid experimental investigations in poisoning cases by the detection and experimental determination of toxic agents, particularly the obscure potent substances employed by the natives; to carry out such chemical and bacteriological tests in connexion with water, food stuffs, and health and sanitary matters as may be found desirable; to promote the study of disorders and pests which attack food and textile producing and other economic plant life in the Sudan; to undertake the testing and assaying of agricultural, mineral and other substances of practical interest in the industrial development of the Sudan.

The Director of the laboratories is Andrew Balfour, M.D., and the volume is published by the Department of Education of the Sudan Government at Khartoum. In so far as we can judge these laboratories are performing well these functions which have been recited. Apart from its scientific value the book is full of human interest and gives a more vivid account of life in the Sudan than any book of travel with which we are acquainted.

Notices have been sent to many physicians throughout the United States and are appearing in the medical and public press regarding

an "American International Tuberculosis Congress," to be held in New York City, November 14th to 16th next, and an association known as "The American Anti-Tuberculosis League," which is to meet in Atlantic City next June at the time of the meeting of the American Medical Association.

It should be stated that the gathering in New York next November and the one in Atlantic City next June have no connexion whatever with the International Congress on Tuberculosis authorized at the last session in Paris in 1905, which will hold its meeting in Washington in 1908, under the auspices of the National Association for the Study and Prevention of Tuberculosis. We are assured by Professor Adami that his name has been advertised in connexion with the former scheme wholly without his authority, and that to his knowledge no physician of prominence in the United States has signified his participation in the above "American International Tuberculosis Congress."

At its last meeting of the Provincial Board of Health, it was proposed by Dr. Simard, seconded by Dr. Bissonnette, and resolved: "That the Board of Health of the Province of Quebec wishes to place on record the services of the late Dr. Robert Craik, as a member of the Board." The following resolution was adopted: "The prestige of Dr. Craik among the English element which he represented on the Board, his excellent knowledge of sanitary science, his life-long training for administrative affairs, his practical resources for dealing with difficult questions and finding adequate solutions for the various sanitary problems, his broad-minded views, his mastering the French language quite sufficiently to take part in all discussions, made him a most useful member. His urbanity in all his relations with his colleagues and the officers made him a universal favourite, and renders his loss most painful among all those who were associated with him in sanitary work.

The *Journal of Obstetrics and Gynæcology of the British Empire* intends to issue a second special number devoted to the subject of Ectopic Gestation in December next. The Number for October contains an article by J. W. Ballantyne, which is a charming account of that most interesting work on midwifery, "The Byrth of Mankynde." There is also a discussion upon the originality of the work on the contagiousness of puerperal fever done by Oliver Wendell Holmes and Semmelweis. The editors offer the true solution, that a full knowledge of the situation was only gained by Pasteur and his successors.

The last number of *Le Bulletin Médical de Québec* contains a feature which is new to us in medical journals. This is a record in the form of a catalogue of the surgical procedure of the Hotel Dieu of Quebec during the month of August. The operations duly classified under various headings number sixty-one, and disclose the extent and variety of surgical work which is done in that venerable institution.

According to a recently published estimate, the expenses of the medical student in London may be figured about as follows: On entering one of the large medical schools the bare fees will amount to £30 per annum, with an addition for the first years of £20 as entrance fee—that is to say, £170 to cover the five years. To this must be added the fees for certain additional and necessary practical classes and material, entailing an extra cost of perhaps 12 or 15 guineas. Subscriptions to the students' club will absorb another 15 guineas, and books, instruments, etc., say, £30 more. When examination fees, say 40 guineas, are added, and the official register fee, £5, we get roughly £280; pocket money and lunch in town mean quite another £25 to £30 annually, while putting clothes, board, lodging, etc., at £85 to £100 a year, we reach a total of £850 to £900, if the student gets through in the five years.

The wonder to us is, considering that the majority of people eat too much, that there is not more headache in the world. When total abstinence societies and temperance associations are formed everywhere, men forget that there is such a thing as gluttony in the world. So far as our experience goes we have seen more instances of people suffering from the results of over-eating in Madras than from over-drinking. And the one advice which we will ask medical men in Southern India to give to their well-to-do patients is to eat less. That will not only save them from headaches in a good many cases, but will help them to live far more comfortable and healthy lives than they do at present. *The Antiseptic*, Madras.

It is officially announced in the *London Gazette* that Dr. Diarmid Noel Paton has been appointed to the chair of physiology in the University of Glasgow *vice* Professor John Gray McKendrick, LL.D., F.R.S., who has resigned.

JAMES STEWART, M.D.

Obituary.

JAMES STEWART.

James Stewart — a simple man with a simple name — died in Montreal on the sixth day of October, 1906, in the sixtieth year of his age. At the time of his death he was Professor of Medicine in McGill University, and Physician to the Royal Victoria Hospital.

Dr. Stewart was the son of the late Alexander Stewart, by his wife, Catherine McDiarmid, and was born at Osgoode, County Russell, Ontario, on November 19th, 1846. He was educated in the Public School, and at the Ottawa Grammar School. In 1865 he entered the Faculty of Medicine of McGill University, and graduated in 1869, being then in the twenty-third year of his age. His name does not appear in the prize list of his class. He began the practice of medicine at L'Orignal. Afterwards he removed to Varna, then to Brucefield, then to Winchester. In 1883, he proceeded to Scotland, where he obtained the qualification of Licentiate of the Royal College of Physicians and Surgeons of Edinburgh. In the same year he returned to Montreal and was appointed Professor of Materia Medica and Therapeutics in the Medical Faculty of McGill University. In 1884 he became Registrar of the Faculty, a post which he held till 1891. In 1891 he was appointed to the Chair of Clinical Medicine, and in 1893 to the combined Chair of Medicine and Clinical Medicine.

In addition to these University appointments he was physician to the Royal Victoria Hospital since its foundation; and an honorary president of the section of medicine at the second Pan-American Medical Congress, held in Mexico in 1896. In 1897 he was vice-president of the section of medicine at the British Medical Association meeting in Montreal, and in 1903 he was president of the Association of American Physicians. Nor may we omit to mention his services upon the Editorial Board of this JOURNAL.

The death of Dr. Stewart leaves an obvious break in the ranks of the medical profession, a keen sense of want in the affections of his friends, and amongst the public at large a feeling of loss.

When he fell ill the younger members of the profession went about in perplexity. Men of his own age wondered to whom they would turn for a fresh perception of an intricate case. Persons who were sick were unwilling to die without the formality of a consultation with a physician upon whom the profession appeared to depend. It is worth enquiring for our own instruction why these things are so.

Dr. Stewart was devoid of exterior grace in manner or in speech. His manner was simple almost to rudeness. His disinclination to talk went nearly to the point of silence. Nor did he find an outlet in writing for the expression of those inward graces which all who came in contact with him felt that he possessed.

The truth in this enigma is that Dr. Stewart achieved his high position in the hearts and minds of his fellow men not so much by what he did as by what he was. In virtue of his inherent quality, simplicity of manner was redeemed from awkwardness, and became gracious; his reticence had nothing of taciturnity, nor had his silence anything of reserve. It was as if a subtle sympathy went out from him, which did not require speech for its expression.

There is something more. Dr. Stewart was learned in medicine. But he had transmuted learning into knowledge, knowledge into wisdom. Learning was his raw material, and when, through experience, he had converted learning into sagacity, it faded into the texture of his mind, and had no longer an independent existence. Facts and theories were to him the mere tools with which he worked in the secrecy of his own mind.

This acquaintance with the best which had been said and thought and done in medicine came to him as only it comes to the man who scorns delights and lives laborious days. He was the first in Canada, we believe, who systematically went to headquarters, and persistently enquired what men knew.

He was as well known in Vienna as in Montreal, in the one place a learner, in the other a teacher, teaching by his work with his patients, not by handing out theories to his students.

A simple character is always the most perplexing. That is why we find it hard to make clear that Dr. Stewart was sober, yet not sombre: shy and retiring, yet no recluse: himself without wittiness, yet the cause of merriment in others. The grasp of his hand, and the gaze of his steady eyes were more eloquent than any speech. His touch upon one's shoulder was more affectionate than an embrace. Still more curious, it is when members of the profession meet together to make merry that he is most missed. His spring of humour was small, yet it came from a great depth; and wherever he was there was a feeling of trust, of good nature, and all things which are friendly to good feeling.

We are not pretending that Dr. Stewart was a universal genius, or even a genius of any kind. He would have smiled a contradiction, had anyone made so silly a statement in his hearing. His capacity for organization was not high, nor was his judgment of either men or affairs very good. His initiative was small, and his counsels were always in favour of retaining the thing which had been. Nor did he interest himself much in matters which lay outside of medicine, in books, in men, or in women. For one who so ardently desired peace and quiet he had a strange liking for histories of war and accounts of battles. Few men were better informed upon the wars of the past century. The only public capacity in which he figured was as President of St. Andrew's Society, and even that *rôle* was not much to his liking.

A Resolution passed at a meeting of the Medical Faculty of McGill University, Monday, October 8th, 1906, is an earnest of the high esteem in which he was held by his colleagues who knew him best.

"Resolved, That the Members of the Medical Faculty of McGill University desire to record their sense of the deep loss which they have sustained in the death of their esteemed colleague and friend, Dr. James Stewart, Professor of Medicine and Clinical Medicine.

"Dr. Stewart's connexion with the Faculty of Medicine has been a long and brilliant one. From the moment of his arrival in Montreal in 1883 he was intimately connected with the work of the Faculty, as Registrar, and as Professor of Materia Medica and Therapeutics. Subsequently he was appointed to the Professorship of Clinical Medicine, and later to the combined Chair of Clinical Medicine and Theory and Practice.

"In addition to his University appointments he was intimately associated with the hospitals of Montreal, as Attending Physician — first in the Montreal General Hospital, and subsequently in the Royal Victoria Hospital.

"As a teacher Dr. Stewart earned an enviable reputation for simplicity, and lucidness, an intimate knowledge of the literature, and the power of presenting tersely the salient features of his subject.

"As a physician his practice was characterized by sound judgment, wisdom, and never failing common-sense, which never lost itself in useless verbiage,— qualities which assured him ample recognition by the medical profession and the public, not only in Montreal, but in the Dominion at large.

"His reputation was further enhanced by numerous and valuable contributions to the literature, particularly in the domain of neurology, to which he devoted special attention.

"To these qualities of the mind were added those of the heart, which most appealed to his patients — a quiet but none the less deep sympathy,— a readiness at all times when called upon to render assistance, and a steadfastness that know no wavering.

"In private life his conduct was marked by a high sense of honour and truth, and a desire to fulfil in all respects the highest ideals of his profession. Of a retiring disposition, he was ever averse to the publicity which his many talents and high position might have gained him, though he was the recipient of many honours which were not of his seeking, but were a tribute to the esteem in which he was held by the profession in Canada and the United States.

"In this brief and inadequate testimony to their late colleague the Members of the Faculty of Medicine desire not only

to express their personal loss but to convey to his sorrowing relatives sympathy in their bereavement."

To conclude, we cannot do better than to reproduce the words of Rev. James Barclay, spoken at the funeral ceremonies in St. Paul's church. They are better than those which we have employed:

"We are met to pay our tribute of respect and affection to one whose professional fame and whose personal worth were widely and gratefully recognized, not only in this city, but throughout the Dominion. Had he himself been asked what should be said on this occasion, he would have answered: 'Let little or nothing be said.' If ever there was a man who was content to live unnoticed, and who would have been content to die unnoticed, it was Dr. James Stewart. All the honours that came to him in life were unsought. They were thrust upon him as the inevitable reward of sterling work and genuine worth. He was a man of retiring and reticent nature, and of a singularly quiet and unobtrusive bearing, and it was only those who knew him well who knew the riches of both mind and heart that lay hidden behind the simple and unassuming manner. He bore his weight of knowledge and skill, and the burden of his honours 'lightly like a flower.'

"He was a member of a noble profession, and he further ennobled it by the integrity of his character and of the unselfishness of his services, and he enriched it by his valuable contributions. He was devoted to his life's work — an earnest and faithful student in his earlier days, he continued still to be a student when he had been promoted to a high place in the rank of teachers. Simplicity, sincerity, reverence, unselfish kindness, these were the features of Dr. Stewart's character that most impressed those who had the privilege of knowing him. Honoured as perhaps few men have been with the confidence and esteem of his professional brethren, reverenced with the respect and affection of his students, he was trusted and beloved by his patients, and warmly appreciated by his personal friends. Montreal loses in him one of its worthiest citizens, and the medical profession loses one of its most gifted and most esteemed members. The knowledge he acquired and the skill

to which he attained were ever regarded by him, not as means to self-promotion, but as gifts to be used in the service of his fellow-men, and that service was rendered with an unselfish readiness and generosity which secures for his memory a warm place in many a heart to-day. Not what he might make for himself, but what he might do for others was the prevailing purpose of his life. Could he have known all the grateful and loving recollections that have been awakened by his death, all the kindly things that have been said of him, by his brethren, by his patients, by his friends, he would have felt that his life had not been in vain. 'He being dead, yet speaketh.' Through his teaching and his example he will still live, and the fruits of his life will be seen in the lives of many of the students who were privileged to know him as teacher and as pattern."

Reviews and Notices of Books.

American Practice of Surgery. Bryant and Buck. Vol. I. William Wood & Company, New York, 1906.

This volume is the first of the new system of surgery which is being brought out by Drs. Bryant and Buck, and one may say at the outset that if the promise of this first instalment is fulfilled the whole work will be one worthy of American surgery. A feature of interest to Canadians is that several of the chapters have been, and in the succeeding volumes are to be, written by Canadians. Volume I. is divided into five parts, as follows: "Surgical Pathology," "Complications and Sequelæ of Surgical Conditions," "General Surgical Diagnosis," "General Surgical Treatment," and "General Surgical Prognosis." There is in addition an introductory chapter of an historical nature upon the Evolution of American Surgery, written by Stephen Smith of New York. It is a full survey of the history of American surgery written in pleasing style. The chapter on Surgical Pathology, to which several men have contributed, is excellent. The whole occupies close upon 400 pages. Inflammation is taken up by Warthin of Ann Arbor. Disturbances of Nutrition in connexion with Surgical Diseases and Conditions, and Tumours and Tumour Formation, are both written by Professor A. G. Nicholls of McGill, while Gaylord contributes a very interesting summary of our knowledge concerning the parasitical relations of cancer. Both Dr. Nicholls' chapters are thoroughly well done, up-to-date from the pathological aspect, and from the literary side written in a style which is a pleasure to read. His illustrations, which are all drawn from the McGill Museum, or from his private collection, are especially worthy of note. Of the recent study upon tumours, especially their pathogenesis, Professor Nicholls presents a very satisfactory account in the space at his disposal. He sets forth strongly the view held by most of the present day pathologists upon the non-parasitic nature of cancer. It is interesting to read the following chapter by Gaylord upon the same subject which presents, very strongly too, it may be said in passing, the infectious origin of cancer. All the late work of Ehrlich and Apolant, Jensen, Loeb, and the many other workers, including his own valuable contributions from the New York State Laboratory, is brought up to date.

The chapter upon Inflammation in its Surgical Aspect, by Warthin, is sufficiently full, but one misses a discussion, even the very mention of the recent work upon Opsonins, of Bier's artificial hyperæmia, and

Klapp's suction cups in treatment. These, which have lately become so prominent, deserve at least some notice. The chapter upon "Infections which sometimes occur in various surgical diseases and conditions," by Paul Munro Pilcher of New York, leaves perhaps something to be desired from the pathological standpoint, but the clinical side is excellently handled. To cite one instance: it can hardly be said nowadays that the cause of *gangrène foudroyante*, or emphysematous gangrene is the bacillus of malignant œdema. The few chapters devoted to tetanus are hardly sufficient for a disease of its gravity, and for one that is yearly claiming greater interest. The enormously important experimental work of Myer and Ransome, Marie and Morax, and others, is given but scant mention in view of its very radical bearing upon clinical work.

Of the article on Shock, contributed by Bloodgood of Johns Hopkins, it is difficult to speak too highly. In the space at his disposal he has resumed thoroughly all the recent contributions, especially of Crile, to the subject, including a consideration of Lenander's observations on the sensibility of tissues, and those of Bier and others on spinal anæsthesia in so far as these observations bear on shock. Not a little on this subject has been done by the Hopkins' school with their blood pressure methods and their intraneural method (Oberst) of local enæstheesia. This aspect of the subject is naturally given a thorough appreciation.

Under the heading of General Surgical diagnosis we have four chapters, 1, the general principals of surgical diagnosis; 2, the body fluids in general surgical disease, with special reference to their diagnostic value; 3, the epiphyses and their radiographic interpretation, and 4, the technique of radiographic work and the interpretation of radiographs. The two chapters upon radiographic work are good; that upon the epiphyses is hardly full enough, but the other by Osgoode and Dodd of Boston (two of the best men in America), is one very greatly needed by the general practitioner, and will prove a valuable contribution. The chapter on General Surgical Prognosis, a somewhat difficult subject, is by Bacon of New Haven. He has given the subject excellent treatment, and we note with pleasure that he includes the newer work on diabetes and "acidosis." The General Surgical Treatment is written by J. H. Moore of Minneapolis. It represents the wide experience of a surgeon of the higher type, one who believes in perfect technique, but believes still more in judgment. He lays constant emphasis upon the necessity of simplicity in the mechanical side of surgery, and upon a properly grounded knowledge of principles in

the training of surgical judgment. Inevitably in a book of this kind, written by several authors there must be inequalities, nevertheless one can give one's hearty recommendation to the work considered as a whole.

E. W. A.

In the Van. By Dr. Price-Brown [Eric Bohn]. Illustrated by F. H. Brigden. Toronto: McLeod and Allen.

Dr. Price-Brown is the most recent of those physicians who have made an excursion into the precincts of literature, "as a pastime," he tells us, "from the rigors of professional life," Certainly, Dr. Brown must have passed the time pleasantly in so agreeable a diversion. It is fair, however, to say that literature is not merely a pastime for the writer. It is an engaging and absorbing employment, a hard trade or art; and if effective work is to be done it must be undertaken with other motive than a desire to pass the time. Literature and medicine are hard masters. A man cannot serve both. There is evidence in this book that, if Dr. Price-Brown were to yield to these hard terms, he might tell a story as well as Mr. Macdonald Oxley or the late G. A. Henty. His style of writing reminds one of these two authors.

"In the Van" is a novel, and groups the incidents around the war of 1812. The details of the military movement are given with precision and accuracy, and must have cost the author infinite research. The accounts of battle are spirited, and the narrative of the march from Halifax to the Great Lakes is full of incident.

The book is a series of scenes or incidents rather than a continuous narrative bound down to a leading theme, and many of them hamper rather than help the story. The sea-fight in Chapter VII. is a case in point. Besides, perhaps Toronto is not the best place in the world for acquiring a feeling for salt water. Sailors do not speak of the "big mast,'" nor has it ever been the custom to indicate the time of day on board ship by "nine bells." We could wish for a little more constraint in description. The time has gone by for the employment of such expressions as "with a convulsive leap the young man's heart seemed to bound into his throat." A physician of Dr. Price-Brown's accomplishment, whose specialty is laryngology, should not fall into that error.

International Clinics, Vol. III., Sixteenth Series. Edited by A. O. J. Kelly. J. B. Lippincott Company, Philadelphia, 1906.

This volume of the International Clinics does not strike one as being particularly attractive either in subject or treatment. There is, how-

ever, an account of life in the Antarctic regions from a medical point of view, by Dr. Harvey Pirie of Edinburgh, who was medical officer to the Scottish Expedition of 1902-04.

THE MEDICAL EPITOME SERIES. Edited by V. C. PEDERSEN, M.D. MATERIA MEDICA AND THERAPEUTICS. By EDWARD J. KIEPE, Ph.G., M.D. Lea Brothers & Company, Philadelphia and New York.

This series of epitomes is intended to place the respective subjects concisely before the students. This book upon Materia Medica and Therapeutics does do.

THE PRACTICAL MEDICINE SERIES. Edited by GUSTAVUS P. HEAD. The Yearbook Publishers, 40 Dearborn Street, Chicago.

We have before us of this Series the following volumes:—General Medicine, edited by Frank Billings, M.D., and J. H. Salisbury, M.D.; Obstetrics, edited by James B. DeLee, M.D., and two collaborators; Gynæcology, edited by Emilius C. Dudley, M.D., and C. von Bachelle, M.D.

These volumes are three of a series of ten which are issued at about monthly intervals, and are intended to cover the field of medicine and surgery. Each volume is complete for the year prior to its publication on the subject of which it treats. The series is published in the main for the general practitioner, but the arrangement in several volumes enables those interested in special subjects to purchase only the parts which they desire. We have frequently mentioned these volumes, and expressed the opinion, which now we reiterate, that if a general practitioner would master the contents of these books he would have a wide and varied knowledge of his profession. The series is well edited, and carries out adequately the idea by which it is actuated.

CHEMISTRY; GENERAL, MEDICAL AND PHARMACEUTICAL. A Manual by JOHN ATTFIELD, F.R.S.; edited by LEONARD DOBBIN, Ph.D. 19th Edition. Lea Bros. & Co., 1906, Philadelphia and New York. $2.50 net.

The first edition of this book appeared in the year 1867; and since that time it has passed through 19 editions. In addition to this presumption of excellence we are informed that a gold medal was awarded to the author of this manual in Vienna in 1883, and in 1896 the prize of a diploma of honour. During these 40 years we have had occasion to mention the successive editions always with praise, and

now it only remains to say that a new edition has appeared. In this time the book has grown from a handbook of practical chemistry only to a considerable volume of over 700 pages. We hasten to add that nothing of recent importance has been omitted from this standard text-book. It is entirely probable that present-day students will accord to this volume the favour which it has received from so many generations of their predecessors.

A Primer of Psychology and Mental Diseases. By C. B. Burr, M.D., Medical Director of Oakgrove Hospital for the Insane, Michigan. 183 pages. F. A. Davis Company, Philadelphia. $1.25 net.

Dr. Burr is known to all who are interested in mental diseases from his long occupancy of the position of Secretary to the American Medico-Psychological Association. This is the third edition of his little work and is entirely adequate for the needs of the student. Dr. Burr's pleasant personality pervades the book.

Philadelphia Hospital Reports, Vol. VI., 1905.

This volume is issued by the Department of Public Health and Charities having charge of all the institutions of charity in the control of the City of Philadelphia. This volume affords information about the work which is being done in the more important medical institutions of Philadelphia. In addition to this the book is of value in giving many local circumstances in connexion with that important centre of medical practice and research.

Pharmacopœia of the Montreal General Hospital and the Royal Victoria Hospital. Published by a committee composed of members from both Hospitals' Medical Board.

The combined pharmacopœia of the Montreal General Hospital and the Royal Victoria Hospital, long talked of, has at last made its appearance. This constitutes the third pharmacopœia issued by the Montreal General Hospital, but though it is possible to recognize the former edition, many alterations and numerous additions have been made, some no doubt due, as the name signifies, to the leaven of the younger hospital.

That it will fill a long felt want in both institutions, its publication indicates; though its warmest reception will doubtless come from the student body, who are now in a position to criticize and approve the formulæ tested and tried by their teachers, and who can now more readily understand the somewhat enigmatical prescriptions frequently appearing on the out-patient's card.

As an educational factor in the practical therapeutics of the university it is bound to play a large part, and this we venture to think it can well do. The book consists of eight sub-divisions beginning with those formulæ in general use, and ending with directions for the sterilization of various surgical appliances; the latter filling a long felt vacancy in the wants of the student and recent graduate. Other subdivisions supply the needs of the various specialists. Throughout the book the metrical system figures, though the old measure is also largely retained.

With the exception of the few typographical errors, such as seen on the last page, this little book of 80 pages, in clear type and bound in limp cloth, is one of which the committee who are responsible for it may feel will be to the credit of the two hospitals.

MANUAL OF ANATOMY. By A. M. BUCHANAN, M.A., M.D., C.M., Professor of Anatomy, Anderson's College, Glasgow. Vol. I. Osteology, Upper and Lower Limbs; 268 illustrations. London: Baillière, Tindall & Cox.

Another anatomy for the poor overworked student. With so many good textbooks and dissections is there room for another? Professor Buchanan evidently thinks so. This work is a combination of a textbook and a manual on practical anatomy. After 259 pages devoted to Osteology and illustrated by a number of rather crude but very understandable drawings (many in colour), the anatomy of the upper and lower extremities is taken up. This part is on the lines of a dissecting manual, and is very good. First, surface markings are given; then the muscles, vessels and nerves are described as met with in these regions, and finally the joints. These are described in the order with which they are met with in dissection. Embryology is also dealt with after the description of each part or organ. The first volume is good and up to date; but there has not been much change in the anatomy of bones, and the extremities, for a good many years. The true test of the book will be the volumes on the viscera and nervous system. This first volume is very suitable for the first year students as it contains nearly all, though not all, the amount of information required.

Medical News.

MONTREAL GENERAL HOSPITAL.

During the month of September there were admitted to the Montreal General Hospital 271 patients, and 260 were discharged; the deaths

numbered 17. In the Out-Door there were 4,018 consultations, and the ambulance responded to 136 calls.

ALEXANDRA HOSPITAL.

The admissions, discharges and deaths at the Alexandra Hospital from 9th July until September 30th are as follows:

	Admitted.	Discharged.	Died.
Diphtheria	37	20	3
Scarlet Fever	20	7	0
Measles	8	8	0
Erysipelas	1	0	1
No disease	1	1	1
Total	67	36	4

The annual meeting of the Winnipeg Medical Association was held on 8th October. President Bell was in the chair, and after the annual reports had been read, the following officers were elected for the ensuing year: President, Dr. E. W. Montgomery; first vice-president, Dr. J. R. Davidson; second vice-president, Dr. N. J. McLean; secretary-treasurer, Dr. C. H. Vrooman; councillors, Drs. McKenty, H. Mackay, Galloway and Todd. Dr. Bell, the retiring president, then gave his address.

At the Aberdeen University quater-centenary celebration the honorary degree of LL.D. was conferred on Dr. A. B. Macallum, F.R.S., Professor of Physiology in the University of Toronto; on William Peterson, C.M.G., Principal of McGill University; on Fred. P. Walton, Professor of Roman Law at McGill University, and on William Wilfred Campbell, of Ottawa.

Retrospect of Current Literature.

SURGERY.

UNDER THE CHARGE OF GEORGE E. ARMSTRONG.

"Sympathetic Ophthalmia." Editorial in *Boston Medical and Surgical Journal*, October 11th, 1906.

During the past year two researches in this field, of more than ordinary interest, have appeared, and indeed the second of these gives promise of being a notable advance.

In the first article referred to Professor Fuchs* presents one of the admirable studies for which he is so justly noted. It has been known for many years that the histologic changes of sympathetic ophthalmia are characteristic. Fuchs reports that he has been able to make the diagnosis with the microscope alone in 181 cases. He presents a very complete pathological description of the disease and gives new and important data as to the locality of the lesions and as to the frequency of their occurrence.

The second study comes from zur Nedden of Bonn, and is along experimental lines. A few years ago Schirmer succeeded in two instances in producing a process of rabbits' eyes similar to sympathetic ophthalmia by inoculating pieces of the ciliary body from eyes removed for this disease. Zur Nedden has accomplished this and advanced much further. By transferring blood from two cases of sympathetic ophthalmia to the vitreous of rabbits he has produced this disease. He has inoculated a second series of rabbits with vitreous from the first and again produced the process. From the second rabbit's vitreous he has obtained a bacillus which will cause a plastic uveitis when injected into the vitreous, the carotid or the venous system. By treating his second case with serum obtained from the first he was able to effect a rapid cure.

Zur Nedden himself is exceedingly cautious in drawing conclusions from two cases and expressly states that his results can only be regarded as suggestive until confirmed by a large number of observations.

Many ophthalmologists will recall the enthusiasm with which Deutschmann's experiments, apparently proving that infection of the second eye was due to the migration of bacteria along the optic nerve sheath, were received twenty-five years ago. The problem was regarded as solved. But later investigators failed to confirm his results and ophthalmology learned a lesson in conservatism. Thus zur Nedden's work will be accepted as he offered it, not as a final solution of the question but as pointing out the most promising direction for future investigations. He himself is Sæmisch's assistant and is regarded as one of the most productive of the younger German school.

A. D. Bevan, M.D. "The Diagnosis and Treatment of Tuberculosis of the Kidney." *The Journal,* October 6th, 1906.

The views on the subject of kidney tuberculosis have changed greatly within the last twenty years. Although Ammor as early as 1833

* Archiv. für Ophthalmologie. Bd. lxi. Heft 2.

pointed out clearly the essential clinical points, it has only been within the last ten years that the diagnosis and treatment have been placed on a sound working basis, and even to-day the frequency and importance of the lesion is not generally understood by medical men. In 1885 H. Fisher, in the German Congress of Surgeons, condemned all extensive operation for tuberculosis of the kidney, especially nephrectomy; and in the same year von Volkmann said that he doubted whether operative treatment of the kidney or kidney pelvis had any real value. Some six years later Madelung stated nephrectomy was indicated when it could be definitely established that the process was limited to one kidney. The results obtained at this time were not good, the mortality being between 28—47 per cent. With improved means of examination, the information gained by the X-rays, the cystoscope, catheterization of the ureters, and cryoscopic examination of the blood and urine, this operation has come to give most excellent results and is now regarded as being one of the most successful operations in surgery. We now know that tuberculosis of the kidney is a fairly common disease, that it is almost always the result of infection through the circulation, and that it is primary in one kidney in over 90 per cent. of cases. Primary is here used in the sense that in the individuals affected it is this focus which calls most urgently for treatment, it is strictly secondary to some small and important focus in lung, gland, or bones. Tuberculosis of the genito-urinary tract, with but few exceptions, begins at one of four points, the kidney, tubes, epididymis, or prostate. The symptoms of kidney tuberculosis frequently resemble those of other conditions, the principal ones being simple pyelitis and pyelonephritis, stone, and neoplasm. Other rarer conditions are the so-called essential kidney hæmorrhage and polycystic degeneration. In ordinary cases, when a differential diagnosis has to be made the following procedures are adopted, careful history and physical examination, several X-rays taken, examination of urine for tubercle bacilli, etc., a cystocopic examination of bladder, especially of the ureteral orifices, and cryoscopic examination of the blood. Following this method it has been possible to make a correct diagnosis in over 80 per cent. Resection of the kidney is to be practically discarded, and nephrectomy performed when the disease is limited to one kidney. If both are involved, or when the patient's general condition is such as not to warrant any radical operation nephrotomy as a palliative measure to be followed if recovery takes place in general condition by a one-sided nephrectomy is indicated.

F. T. Travers. B.S., Lond., F.R.C.S., Edin. "Suture of Perforating Wound of the Heart." *Lancet,* September 16th, 1906.

The case reported was that of a young man, aged 19, who fell on a spike of an iron fence and was impaled on it. The lower portion of the sternum was fractured, and a large portion driven into the ventricular wall of the right side of the heart and firmly held there, so that little hæmorrhage took place. Further examination by means of an ostioplastic flap showed the wound to be trifid, and extending up to the interventricular septum. On removing the piece of bone a profuse hæmorrhage followed, which was well controlled by plunging three fingers into the rent. The wound was first roughly closed, and then reinforced by a row through the muscular coats and again by a row of Lembert through the pericardial serous coat. The most noticeable features of the case were the plugging of the wound in the heart by the detached piece of sternum, and the tolerance shown by the heart to the injury and handling required at operation. The insertion of each suture was observed to act as a distinct stimulus. There was remarkable little collapse, no air-hunger or delirium. The severe injury to the pericardium induced excessive secretion, but produced no other symptoms as free drainage was secured. The case died on the eleventh day, the cause being apparently failure of the heart's action, due to the pressure of the clot slowly forming on its anterior surface, which also blocked the pericardial wound and prevented the escape of the blood oozing from the gap in the wound in the heart. The small opening was due to the necrosis of the heart muscle most probably due to the traumatism.

W. F. B.

MEDICINE.

UNDER THE CHARGE OF F. G. FINLEY, H. A. LAFLEUR AND W. F. HAMILTON.

M. H. Nemser. "The Elimination of Calomel." *Zeitschrift für physiologische Chemie,* September 6th: Editorial in *N. Y. Medical Journal.*

M. H. Nemser has shed some light on the probable series of events that take place when colomel is taken into the gastro intestinal tract. Making use of intestinal fistulæ in dogs, and test tube experiments as well, he comes to the conclusion that the acid of the stomach has little

or no action on the calomel, and that if substances like corrosive sublimate can be formed from calomel in the body, which on *a priori* grounds has been assumed as probable, such mercuric compounds are at least not formed in the stomach within an hour and a half. The solution of portions of the calomel begins in the duodenum, and reasoning from his fistula and test tube results, Nemser believes that the pancreatic juice is the most potent factor in effecting the solution. What rôle sodium chloride (from the gastric juice) or the substances of nutrition may play in aiding this solution is as yet undetermined.

As to the absorption of the portion of calomel made soluble by the pancreatic secretions, the author believes that this takes place not higher up in the intestine than the ileum, in which place the process of solution reaches its maximum. It is highly probable that the soluble mercuric compound set free is either absorbed in the large intestine or precipitated by the sulphides present in that viscus, since the fæces contain no trace of soluble mercurial substances. The kidneys, the liver, and the large intestine retain a portion of the calomel for a considerable length of time, but as to the form of mercuric compound which is formed from the calomel in the process of solution, it is to be regretted the author does not enlighten us.

"The Clinical Value of Cryoscopic Examinations." Editorial in *N. Y. Medical Record.* October 13th, 1906.

It is nearly ten years now that Koranyi of Budapest applied the determination of the freezing point (cryoscopy) to the study of pathological urine. Since then work has been constantly going on in various parts of the world with this method, and the results obtained seemed to vary so much that a great deal of skepticism has been expressed, both here and abroad, as to the actual clinical value of cryscopy. We have had occasion more than once within these years to comment on the situation editorially. As has been and is the case with most of the newer laboratory methods, experience, tempered by judgment, and sustained by an increasing accumulation of statistics, has gradually crystallized opinion as to the value of cryoscopy, until to-day its limitations are quite well understood, while its advantages are fully appreciated.

After Koramyi's historic work came that of Claude and Balthazard; of Achard and Castaigne, of Bernard, of Casper and Ritcher, of Rovsing and of Kümmel—to mention only some of the more important investigators in this interesting field. But little of importance has been published in this country on cryoscopy during the past few years, if we except the practical and thorough paper of Dr. A. A. Berg of this city.

As the subject developed under the influence of these researches, the students of cryoscopy and its clinical applications came to be divided into two camps. On the one hand there were men who, like Claude and Balthazard, believed that cryoscopy was by far the most important method of determining the renal function, and that by simple calculations it was possible to determine even the relative amounts of certain constituents from the freezing point of the urine. On the other hand, there were the skeptics, led by Rovsing, who accumulated a mass of material to prove the fallacies of the method and its utter worthlessness, save in certain limited circumstances.

The last word in the subject has, of course, not yet been spoken, nor will it be for some year to come; and yet, in the recent study of functional diagnostic methods of Kümmel (*Berliner klinische Wochenscrift*, July, 2 and 16, 1906), we find such an impressive array of facts and figures collected by that well-known sugeon in the course of six years, and based upon 404 operative cases of kidney lesions, with 1,000 or more cryoscopic examinations, that we think it worth while to present them here as probably the best solution of this important problem which has yet been offered.

Kümmel concludes from his experience that cryoscopic determinations made by beginners are worthless. It takes a great deal of experience to eliminate the source of technical error. Cryoscopy of the combined urines of both kidneys is of no practical value, as the freezing point varies so widely under normal conditions. Cryoscopy of each separate kidney is valuable, as the freezing point of the diseased kidney is constantly higher than that of the healthy one. The freezing point of the blood is constant, and therefore a much more trustworthy criterion. Normally the blood freezes at 0.56°C., with normal variations up to 0.57°. If the freezing point is lower than that,, the kidneys are not eliminating the metabolic products fast enough, and are probably diseased. If the freezing point of blood reaches—0.60°C. nephrectomy is a risky operation, as the two kidneys combined do not excrete sufficiently well. If the freezing point is still lower, the operation is absolutely contraindicated.

Of the 404 operations by Kümmel, 189 were nephrectomies, 6 resections (partial) of renal tissue, 45 nephropexies, 11 decapsulations, 12 incisions of panapephritic abscesses, and 8 plastic operations on the ureter. The total mortality was 12.6 per cent. There was, however, a marked reduction in the mortality in the cases of operation after the introduction of cryoscopic examinations, as compared with the mortality of the preceding years. Thus, in 140 nephrectomies performed after

cryoscopic there was not a single death; on the other hand, 6 deaths due to insufficiency of renal function, or to the absence of a second kidney, were recorded among the 41 nephrectomies which were done before the introduction of cryoscopy and ureteral catheterization.

There can hardly be any question, after such convincing proofs have been submitted, that cryoscopy, especially cryoscopy of the blood and of the urine of each kidney separately obtained, is of the utmost value as a diagnostic and prognostic aid in renal sugery. By this method, combined with other modern modes of examining the condition of the kidneys, the surgeon can be very reasonably sure that the second kidney is present and that it secretes enough urine to allow the patient to survive the operation. The limitations of the method are now well defined, and if the surgeon bears them in mind, and does not rely on cryoscopy to the exclusion of other diagnostic methods, he will not be disappointed in the results of the freezing-point determinations.

P. G. Woolley M.D. "The Prevalence of Intestinal Parasites in Siam." *Journal A. M. A.*, October 6th, 1906.

Dr. Woolley has examined the inmates of the government prison at Bangkok with reference to the occurrence of intestinal parasites, and found them present in 36 per cent. of the cases tested. It had been stated that amebiasis was uncommon there, but he found amebæ in the dejection of eleven out of fifty prisoners, at least three of whom were suffering from a genuine amebic dysentery. They constituted 61 per cent. of all the cases in which parasites (exclusive of monads, which were present in about 60 per cent. of all cases) were found. After amebæ, the most frequent findings were the ova of *Uncinaria americana, Tricocephalus dispar* and *Strongyloides intestinalis*, those of *Opisocorcus sinensis, Ascaris lumbricoides* and *Hymenolepis nana* being present each in one case. In half the patients more than one parasite was present. The only conclusion one can draw from the figures is that intestinal parasites are common in Siam and that amebic infection is very frequent. So far as Woolley has been able to learn *Opisthorcus sinensis* has not been previously reported from Siam.

H. T. Ricketts. "Rocky Mountain Spotted Fever." *Journal A. M. A.*, October 6th, 1906.

Dr. Ricketts, Chicago, reports that he has succeeded in alternating inoculations of monkeys and guinea-pigs in perpetuating Rocky Mountain fever, and in preserving the virus. He describes the symptoms in the animals experimented on, showing the identity as well as that of the

pathological conditions with those observed in the human species. He has also tested the infectiousness of the various organs of the bodies of the animals. The animal was bled from the carotid to deprive it of all the blood possible, and then each organ was ground with sterile sand and suspended in a physiologic salt solution. The emulsions of each were brought as nearly as possible to the same density, and 5 cubic centimetres of each were injected intraperitoneally into guinea-pigs, weighing from 350 to 550 grams. The greatest virulence seemed to be in the organs that naturally contained the most blood, such as the spleen, liver, and bone marrow. In the case of the bone marrow, however, he remarks that the difficulty of its preparation increased the chances of infection, which must be considered. The kidney, however, was quite as infectious as other organs, much richer in blood, which he suggests may be accounted for by an accumulation of micro-organisms in it by reason of its excretory function. Ricketts has not heard of any authentic example of a second attack of spotted fever in man, hence it seems probable that one attack renders the body immune. This was found by experiment to be the case in the monkey, and by reasonable analogy we may assume it to be so in man. He concludes his paper with an account of his observations of the life history of the *Dermacentor occidentalis,* which, in view of the suspicion attaching to the species as the carrier of the infection, is a matter of some importance. The observations were made under laboratory conditions, and he suggests that the various stages may not quite correspond in point of time, therefore, with those in the natural state. More complete observations will be published later.

PATHOLOGY.

UNDER THE CHARGE OF J. G. ADAMI.

R. L. Thompson. "A Study of Epidermal Fibrils." *Jour. Exper. Med.,* 1906, viii, 467.

Thompson has made a study of the fibrils passing between the epithelial cells, in the deeper layers of the skin. These fibrils represent what are commonly termed the intercellular bridges, and they serve to bind the epithelial cells together. Thompson finds that the fibrils are present in the cell body and form a network about the nucleus. He does not venture to discuss the origin of the fibrils, but states that the strands of the different cells are united. These fibrils are increased and become more distinct in certain skin tumours. He compares them with neuroglia, connective and muscle tissue fibres.

BORRMANN. "A case of Addison's Disease following Inflammatory Conditions of the Adrenals." *Deutsch Archiv. f. Klin. Med.*, 1906. Heft. 6.

A man, æt. 31, fell from a height, hitting his left side on a box. Three ribs were broken in the fall. He was laid up more than six months, and after a year began declining. He complained of weakness, gastric crises, great loss in weight, and pigmentation of the skin and mucous membranes. Died four years after the accident. At autopsy both adrenals were found much fibrosed so that little of the original tissue remained. The sympathetic plexuses in the neighbourhood were also involved in the fibrosis. Author reports the case as the first one in which Addison's disease developed after trauma.

VERGER AND CARLES. "Addison's Disease in an Arterio-sclerotic." *Jour de Méd. de Bordeaux*, 1906, No. 7.

Authors report a case of an alcoholic in whom typical symptoms of Addison's disease developed. At autopsy a considerable arterio-sclerosis was noted. From this fact, and that, that in experimental animals arterial lesions may be produced by the administration of adrenalin, the authors endeavour to connect the occurrence of the arterio-sclerosis with the Addison's. Although there were several tuberculous foci in the body the adrenals were not affected. The only change noted in the adrenals and the semi-lunar ganglia was a fibrosis.

Society Proceedings.

MONTREAL MEDICO-CHIRURGICAL SOCIETY.

The second regular meeting for Session 1906-07, was held in the Society's rooms, on Friday evening, October 19th.

The following candidates for temporary membership were proposed:—

Resident Staff, Western Hospital—Drs. Chandler, Reilly and Swift.

Resident Staff, Montreal General Hospital—Drs. Tees, Nelles, Lyman, Richards, White, Hillman, Lomer, Covernton, Weldon, Gillies, McDonald, Gourley, Gurd and Holden.

Resident Staff, Royal Victoria Hospital—Drs. Moffatt, Tull, McArthur, Williams, Hutchinson, Cumming, Burgess, Scrimger, Patterson, Lauchland, Muckleston, McMillan and Monahan.

Resident Staff, Montreal Maternity—Drs. Little, Hammond and Burke.

TWO CASES OF TUBAL PREGNANCY.

A. LAPTHORN SMITH, M.D., presented two cases of this condition before the Society and gave a history of the cases, which will be found on page 709 of this issue of the JOURNAL.

W. W. Chipman, M.D.—These cases are certainly interesting, and as has been said the condition is very much more frequently met with than one would at first suppose. The first case is especially interesting in that there were present at the same time both the tubal pregnancy and the uterine pregnancy. Some time ago I had a case in the country which I operated upon where I had this condition present, and where I thought the condition was a simultaneous one in the two positions. I removed the tube and the uterine pregnancy went on to term. I looked up the question and found it to be very rare where the two conditions were contemporaneous. In this case of Dr. Smith's I think that the uterine pregnancy was subsequent to the tubal one.

The other case is more commonly met with. As to the question of diagnosis the cases which present the most difficulty are those termed the "leaking" cases. The classic case is that of a sudden rupture and the escape of blood into the peritoneal cavity,—this we are all familiar with and such a case is comparatively easy to diagnose. The class of cases where there are repeated small hæmorrhages is the one which presents the most difficulties in diagnosis. Two months ago I had a case where a year previously the woman had a stone pass down the left ureter. It took three months to pass this stone, during which there were the usual attacks of pain.

After the stone was passed she remained well, free entirely of pain, for some six months. But suddenly one day she was seized with severe pain in the left side, of a few hours' duration only, and followed the next day by a second attack. The conclusion at first, and very naturally, was the ureteral passage of a second stone. I saw her and went very carefully over the history. She repeatedly assured me that these last attacks of pain were identical in character with those suffered previously on the passage of the stone. And yet this woman had developed a left-sided ectopic pregnancy. The attacks of pain indicated small repeated ruptures of the gestation sac with slight escape of blood. At the time of the operation I examined carefully the whole length of the left urinary conduit and could find no stone.

Here was a case extremely difficult to diagnose. The physical examination was not very satisfactory as the abdominal walls were thick and at no time had any considerable tumour developed.

As to the distension spoken of by Dr. Smith I have been struck with the sort of uniformity with which this distension occurs in cases where blood has been extravasated in any considerable quantity into the peritoneal cavity. I have no doubt even after most careful methods some blood still remains after closure of abdomen and acts as a foreign body preventing normal contraction of the intestinal wall, irritating the

intestine and so leading to a certain degree of paresis and distension, and I have also no doubt that that organism, the *streptococcus albus,* which is always present in the peritoneal cavity, has also something to do with it in setting up a low grade of peritonitis.

A. Lapthorn Smith, M.D. I am pleased to have heard these remarks of Dr. Chipman on these cases because it is the first time my attention has been called to the fact that we may have tubal pregnancy at a much earlier date than the pregnancy in the uterus. At the miscarriage I was surprised that we did not get a fœtus, although there was quite a large placental mass, but evidently it was because the uterine pregnancy was much younger than the tubal one. I have not come across this in my reading. Another interesting point was that in neither of these cases was irregular hæmorrhage present, although in the majority of cases this has been present. Many cases have been curetted on the supposition that they were miscarriages. Dr. Coe, one of the most experienced gynæcological surgeons of New York, recently reported a case of one of these cases at a private house, when the patient collapsing on the table it occurred to him, that it might be a tubal pregnancy. The ambulance was called and she was removed to a near-by hospital and an abdominal section revealed this to be the case, the abdomen being full of blood. This was one of the leaking cases.

CARDIAC THROMBI.

R. C. Patterson, M.D. Dr. Paterson showed specimens of three cases of cardiac thrombi which had come to post mortem at the Montreal General Hospital within the last two or three months. The first was an obliterating thrombus of the left auricle, the second a ball thrombus in the left auricle, and the third a pedunculated thrombus in the left auricle.

IRREGULAR HEART ACTION.

W. S. Morrow, M.D., read a paper upon Differentiation and Treatment of Irregular Heart Action.

Dr. Morrow began by discussing the cause of the normal heart rhythm, whether it is to be sought for in nervous or muscular structures. On the whole he inclined to the latter view. He referred briefly to the various properties and peculiarities of the heart muscle and pointed out the various kinds of modifying impulses reaching the heart by the nerves. The common forms of Arrhythmia were then considered under the following heads: Respiratory, Diastolic, Auricular and Ventricular Extra-Sytolic, Heart Block, Disturbances of Contracti-

lity. The essential nature of these was discussed and also the methods of differentiating them from one another by the study of the arterial and venous pulse. The bearing of the different types of arrhythmia on prognosis was referred to, and some indications were pointed out for the employment of rest, digitalis, iodides, belladonna and suprarenal extract.

J. B. McConnell, M.D. Very few of us can discuss this most instructive paper as it should be discussed. I think it is among the most interesting to which it has been my privilege to listen, more especially, as at the recent Toronto meeting of the British Medical Association, this subject was taken up and thrashed out in the section of Physiology and Medicine by Mackenzie, Aschoff, Broadbent, and others, not only from a physiological standpoint, but from the points of view of practical interest to the clinician. Aschoff gave a most interesting paper on the histology of the band which runs from the auricle to the ventricle and showed that modified muscular tissue is capable of conducting nerve impulses from the auricle to the ventricle. The practical part of the subject is seen in the fact that there are some kinds of arrhythmia and defective heart action which are not benefited by digitalis, and it is only (by distinguishing the variety present) by the new methods proposed that we can tell which may be benefited and which not, and when heart block is present of specific or toxic causes of degeneration in these fibres, the etiological factor must be recognized in order to get successful results in the treatment of the cases.

F. F. Finley, M.D. Lack of discussion is not lack of interest, and we feel that we are under a debt of gratitude to Dr. Morrow for bringing this subject before us in such a very clear fashion and it will stimulate us to higher interest in our cardiac cases.

At the close of the meeting, Dr. J. Alex Hutchison moved, seconded by Dr. F. R. England, that the President, Dr. Finley, and a committee of the older members of the Society should meet for the purpose of drawing up a letter of condolence to the family of the late Dr. Stewart.

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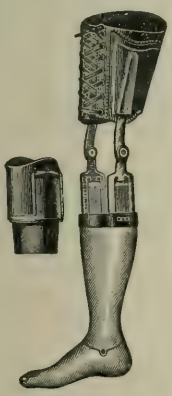

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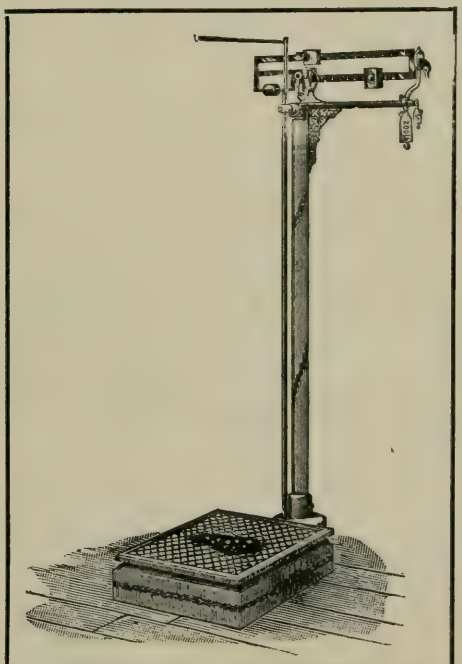

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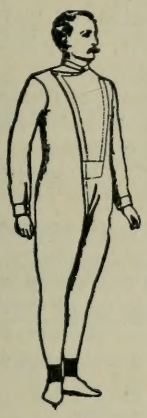

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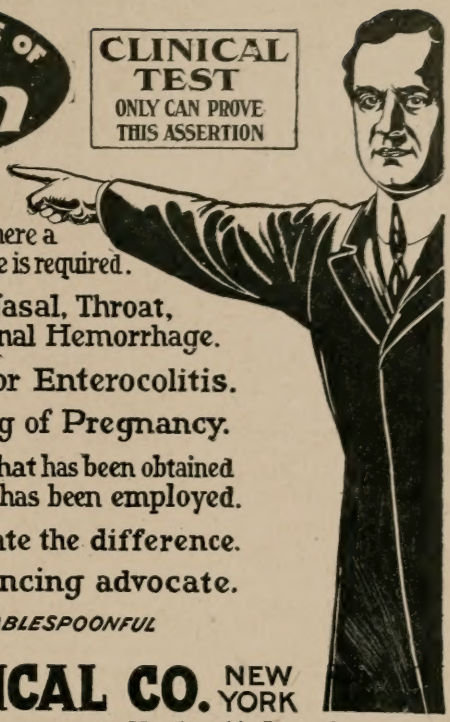

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